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THE NATURE OF CONCEPTS AND THEIR USE AND MISUSE
IN THE SOCIAL STUDIES

by

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A THESIS

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ABSTRACT

The main purpose of this study was to examine the nature of concepts and their use and misuse as a tool of inquiry. In this study a special effort was made to relate theoretical and analytical discussions to the field of social studies by referring to particular concepts as they are found in statements of social studies curricula.

The concept was examined from an epistemological perspective which enables one to ask what kind of knowledge one is concerned with in employing the notion of concept as an analytical tool. In this study knowledge was interpreted as a relation between knower and object known which permits the conferring of a human perspective on the idea of concept. This interpretation was found to be particularly useful for discussing the thesis that concepts are powerful determinants of what people perceive and conceive, and what they consider important, valuable and real.

The influence of concept was further investigated in a chapter on concepts and thinking. Concepts influence their users in terms of how people think and what they think about. This influence may therefore be directional, limiting or distorting. As a result of the various determining factors, the interpretation and usage of concepts in the social sciences may generate ambiguity of meaning and ambiguity of function.

Further, with the view of clarifying the meaning of concepts, the study examined a number of strategies for defining concept meaning. It was pointed out that the meaning of concepts may be specified through the devices of ostentation, substitution, application, analysis, meaning-postulation, and through the devices of internal and external evaluation. Further, it was noted that concepts are characterized by their dynamic nature and variety in openness of meaning.

The functional dimensions of concepts were studied through the categorical and the hierarchical taxonomies in terms of which concepts may be classified. By noting how social science theory concepts play a number of roles, they were explored according to the following categories: descriptive, substantive, relational, classificatory, explanatory, and theoretical. Occurrences of functional ambiguity were indicated. In terms of their function concepts were discussed as elements of a conceptual and a syntactical structure. Hence, it is posited that social science concepts be studied within the limits of the scientific system within which they are embedded.

The study concludes with a paradigm of concept misuses construed from the whole of the preceding discussion. It is hoped that this study contributes to the awareness of the nature of concept as a tool of inquiry for curriculum workers and teachers in the classroom.

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CHAPTER I

INTRODUCTION

Introduction to the Study

The concept in curriculum objectives. "Concepts" and "Processes of conceptualization" are prominent notions in the area of curriculum and instruction. Especially after publications by educators such as David P. Ausubel (1963, 1964, 1968), Jerome S. Bruner (1956, 1960), and Philip H. Phenix (1964),¹ curriculum workers have stressed on the one hand, the importance of the idea of concepts and key concepts for economy and efficiency in learning and on the other hand, the belief that the best way to enhance understanding of any discipline is to study its structure, i.e., its basic concepts and relations among concepts. General and specific educational objectives are being stated in terms of cognitive skills and affective outcomes with reference to certain key concepts, related concepts, and sub-concepts. Consequently, selection, interpretation, and formulation of concepts has become an integral part in the process of constructing instructional programs.

The concept in the study of education. "Concepts"

¹See bibliography for titles and publishers.

and "processes of conceptualization" are at the same time powerful notions for a proper understanding of other educational processes. They are powerful with reference to the thesis that the student's (as well as the teacher's) thinking is influenced by the nature and the structure of the concepts which they learn to employ. Therefore, an understanding of the ways in which concepts are developed and the ways in which they are being manipulated and handled are very important.

It is interesting to note how the nature of the "objectives" of education varies with the changing definition of the concept of "education." Marc Belth has pointed out that what has traditionally been understood as educational objectives are properly speaking only objectives of schooling, that is, of education as an applied enterprise. The main objective of the "study of education" or "education as a discipline" is quite different for it seeks

. . . an understanding of the role played by the elements of inquiry in the operation of thinking as well as the conditions which are called for in order to incorporate their function into human capacities.²

Though the concept of concept itself is rather neglected as an object of systematic study, it belongs essentially to those "elements of inquiry in the operation of thinking" as defined by Marc Belth. Therefore, the study of concepts falls within the realm of the objectives

²Marc Belth, Education as a Discipline (Boston: Allyn and Bacon, Inc., 1965), p. 13.

of the "study of education."

What now is the difference between the meaning of concept in curriculum objectives and the meaning of concept as an object of study for education as a discipline? The difference may be illustrated as follows: To teach the concepts of a body of knowledge is to know that body of knowledge. However, to teach the concepts of those concepts is to know how that body of knowledge is being used. In the first case we are able to think through or with the concepts we learn; in the second case we are enabled to think about the concepts through which we are thinking. To say it differently again: In the first case, we learn to understand a certain model through the concepts which make up that model; in the second case, we learn to understand our understanding of that model, and how it may relate to similar models of understanding things.

The study of concepts as an objective for the study of education has the advantage of providing the teacher and student with an opportunity to reflect on the nature of concepts, how they are being used and misused in the subject matter of social studies curricula. An increased awareness of the nature of concepts, their roles in thinking, their meanings, their functions in the social sciences, and their pathological³ tendencies may help the teacher and curriculum

³The term "pathology of concepts" is meant in this study to refer to any of the ways in which a concept, wittingly or unwittingly, may be misused, abused or misapplied by a person.

worker when they attempt to formulate teaching rationales, when they verbally define their educational objectives, and when they set themselves the task of singling out so-called "key concepts" in their endeavors to organize and structure instructional programs.

Purpose of the Study

This study is an investigation into the notion of concept and its significance for the social studies curriculum and instruction. Interest in determining and reducing the incidence of "pathological" concept use pervades the study.

The study is composed of a discussion in basically five parts. Through examination, interpretation and interpolation of related literature the study seeks to illuminate some epistemological aspects of concepts as well as some influences concepts may bring to bear on cognitive processes such as observing, selecting, relating, formulating and organizing. Since concepts occupy a strategic position in the formulation of curriculum rationales and objectives, ambiguity of meaning and function of concepts is a continuous problem. The study aims at reducing ambiguity of meaning by synthesizing a number of approaches toward clarification and specification of concept meaning. And the study endeavors to deal with functional ambiguity by making explicit some functions concepts may perform in social science theory and disciplined understanding. The study finally hopes to

contribute by synthesizing the ways in which concepts are misused into a paradigm⁴ of the pathological use of concepts.

If the study is successful in meeting its purposes of increasing an understanding of the notion of concepts, then it is anticipated that the study may to some degree assist us in our endeavors to clarify and to read critically educational writings dealing with the teaching of concepts in the social studies.

The Problem

The general problem of the study can be identified through the question: what are concepts and what are some of the ways in which they are being used and misused in the selection, formulation and teaching of social studies objectives?

In order to achieve a coherent discussion the general problem has been broken down into a set of sub-problems. In search of a conception of the term concept the study initially looks at concepts from an epistemological perspective. Some questions being considered at this stage pertain to the nature of the relationship between concepts and reality,

⁴Note that the concept "paradigm" is used somewhat synonymously with "pattern" or "nontheoretical model." A paradigm, in this sense, constitutes a descriptive generalization, providing meaning by acting as a meaningful "ideal type." It should be stressed that a paradigm in itself does not consist of postulated relationships. However, it may in some cases be conceived as an extension of theory by providing meaningful instances or illustrations of that theory.

between concepts and knowledge, and between concepts and processes of cognition.

Concepts, in particular verbal concepts, are an instrument of study for the student of cognitive processes as well as an object of study for the student of semantics. The study consequently proceeds from a combined perspective when it directs itself at the complex question of the relationship between verbal concepts and thinking. Through examination of literature, the study investigates how the reference relationships of the concepts employed may exert influence upon the cognitive structures and processes, and what some of the implications of the findings are for the social studies curriculum.

Concepts contained in social studies curriculum rationales and objectives tend to suffer from a double ambiguity: ambiguity of meaning and ambiguity of function. With the view of assisting in releasing concepts from ambiguity of meaning the study inquires into some ways of clarifying and specifying concept meaning. Next, the study focuses on the functional role of concepts. It considers questions such as: What is the function of concepts in the social studies curriculum? How may concepts be classified? How do concepts operate in scientific theory? And, what is the nature of concepts in disciplined inquiry and disciplined bodies of knowledge? The entire discussion is at various points related to social studies curriculum questions wherever this seems to bear relevance. After the

above questions are examined the study concerns itself with the problem of concept pathology through an investigation into some of the ways in which concepts may be misused.

CHAPTER II

SOME EPISTEMOLOGICAL CONSIDERATIONS OF THE TERM CONCEPT

A fundamental way of embarking upon a discussion of concepts is from an epistemological perspective. We would like to know what a concept is in the light of a general theory of knowledge. Epistemologists, according to Brauner and Burns, want to know what is known, when it is known, who knows or can know and most importantly, how we know.¹ For the purpose of discussion three basic questions will be posed. The first question "Can we know?" is, in principle, answerable in various ways depending on which term is given the stress. If the question is extended to "Can we know what is real?" it becomes partly metaphysical. The second question, "What do we know when we say that we know something?" poses the problem of the epistemological product. And the idea of process is contained in the third question "How do we come to know what we know?"

Similar epistemological questions have been dealt with at length by traditional as well as modern philosophers. The following is a concise and brief examination

¹Charles J. Brauner and Hobert W. Burns, Problems in Education and Philosophy (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965), p. 12.

of the extent to which these discussions provide us with a clearer picture of the concept of a concept.

Can We Know?

Traditionally philosophers have formulated their answer to this question in terms of any one of the three familiar positions of dogmatism (yes, we can have certain knowledge), skepticism (no, we cannot have certain knowledge), and fallibilism (we can only have probable knowledge). Our question becomes pedagogically more significant if we turn the question metaphysical: Can we know what is real?

Conceptualism. A "pure" conceptualist would hold that the objects of thought and the meanings of general terms are concepts, these being mental entities which exist only in the mind. According to this argument, the existence of independent physical objects is inconceivable because the concept of a physical object cannot be separated from the concept of a consciousness relative to which it exists. The link between the "real world" and the "world of the mind" is established by the notion of sense data and correspondence principles.

The conceptualist's position appears most agreeable with the standpoint of the skeptic who holds that ultimately one cannot have certain knowledge about what is real. The skeptic's attitude seems pedagogically undesirable since it claims that one cannot teach any

indubitable knowledge about the "real world." However, because of its always questioning and critical stance, skepticism offers a challenge to the educator. Placed on a continuum conceptualism lies midway between two philosophical extremes: nominalism and realism.

Nominalism. While concepts in the conceptualist's framework are connected with the external world through sense impressions or sense data, in the framework of the radical nominalist the relationship between concepts and the world of objects and events is non-existent or completely arbitrary. There is no order or regularity in the universe except for the fact that man creates order quite arbitrarily through the use of his concepts.

Realism. Phenix who represents the realistic view of knowledge states:

From a realistic standpoint nominalism is epistemologically impious and pedagogically disastrous, a source of internecine strife and intellectual estrangement. . . . The structure of things is revealed, not invented, and it is the business of inquiry to open that structure to general understanding through the formation of appropriate concepts and theories. . . . The nature of things is given, not chosen, and if man is to gain insight he must employ the right concepts and methods. Only by obedience to the truth thus discovered can he learn or teach.²

According to Phenix then, there are "right concepts" and

²Philip H. Phenix, "The Disciplines as Curriculum Content," Contemporary Thought on Public School Curriculum, eds. Edmund C. Short and George D. Marconnit (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1968), pp. 133-137.

"wrong concepts" depending on the way in which they reflect the correct "nature of things." A dogmatist's realism--such as Phenix's point of view--posits that one can have certain knowledge of the external world. On the other hand, a fallibilist's realism holds that one cannot have certain knowledge but only probable knowledge. In this context Bertrand Russell defined a reasonable or rational man as one who always proportions the degree of intensity with which he holds his various beliefs to the amount of evidence available for each belief.³ According to the fallibilistic principle, every empirical concept is only an approximation of the thing or event it stands for.

An alternative view: knowledge of reality constitutes a relation. The question whether an external world can be known by man is often considered to be "empirically proven" or supported by the success with which the "natural," "pure," or "exact" sciences define their concepts, universal principles, and scientific laws. However, Peter Winch points out that to ask whether the mind of man can have any contact with reality at all is not an empirical question but a conceptual one.

³D. J. O'Connor, An Introduction to the Philosophy of Education (London: Routledge & Kegan Paul, 1968), p. 27.

It has to do with the force of the concept of reality. . . . the issue is not to prove or disprove the existence of a world of external objects but rather to elucidate the concept of externality. . . . To ask whether reality is intelligible is to ask about the relation between thought and reality. In considering the nature of thought one is led also to consider the nature of language.⁴

And elsewhere Peter Winch continues:

The concepts we have, settle for us the form of the experience we have of the world. It may be worth reminding ourselves of the truism that when we speak of the world we are speaking of what we in fact mean by the expression "the world": there is no way of getting outside the concepts in terms of which we think of the world. . . . The world is for us what is presented through those concepts. That is not to say that our concepts may not change; but when they do, that means that our concept of the world has changed too.⁵

A short reflection upon the concepts of "reality" as they are posed by the nominalist, the conceptualist, and the realist, as well as by the dogmatist, the skeptic, and the fallibilist reveals that they all rest upon the presupposition that, in fact, there is such a thing as "a God's eye view of reality." The only difference between the various standpoints is that the skeptic believes he cannot get it, the naive realist believes he has got it or can get it, and the fallibilist thinks that he can only get a probable approximation of its nature.

⁴Peter Winch, The Idea of a Social Science and its Relation to Philosophy (London: Routledge & Kegan Paul, 1958), pp. 9-11.

⁵Ibid., p. 15.

Concepts are instruments through which human beings establish and express relationships. In so far as knowledge of the real world is contained in linguistic and prelinguistic concepts, it constitutes a conceptual relationship between the knower and the object known. In this sense, knowledge is always human knowledge. Man creates conceptions of reality, builds structures of knowledge about reality, and makes interpretations of his experiences. Man's knowledge of reality is therefore knowledge of human reality. The difference of this view with the dogmatist's, fallibilist's and the skeptic's perspective is that the idea of a non-human external world is not entertained. Man can experience the world only in a human fashion and in no other way. That is why a so-called "God's eye view of reality" is simply considered to be outside the bounds of man's concern. Luijpen expresses the nature of knowledge and particularly true knowledge in this way:

Knowing the truth about some "real" object or event is always truth in relation to a subject having a certain attitude or standpoint. This does not mean, however, that this relativity of truth must be interpreted in a relativistic fashion. The idea that truth is relative to a subject's perspective implies that truth is absolute in relation to the subject.⁶

The concept of knowledge as a relationship between knower and object known does not preclude the existence of scientific knowledge. A science, says Luijpen, is born when a

⁶William A. Luijpen, Existential Phenomenology (Pittsburgh, Pa.: Duquesne University Press, 1960), p. 151.

particular question, contained as an interest in existence, is critically, reflectively, and systematically taken up.⁷ However, the "real world" of the scientist is not extraneous to the human undertaking. It receives its significance via the faculties of man's mental powers. "In reasoning," says Carroll, "we can use language to construct a "map" of a possible objective reality; the validity of the reasoning is perceived when the map is recognized as self-consistent."⁸ And with reference to the "meaning aspect" of knowing Luijpen states:

Reason is the "locus" where meaning appears and the power to let it appear. The "letting appear" of meaning, however, always takes place from a particular standpoint of the existent subject. Because existence contains many standpoints, there are also many worlds. . . . In principle there are as many specifically different attitudes or standpoints of asking questions.⁹

What would it mean to reach the non-human world of the external things as envisaged by the realist and the skeptic? Luijpen points out that:

To reach the object itself would imply that I could comprehend all possible standpoints in space and time, i.e., that I could make a synthesis of all these standpoints in space and time, so that I could be "everywhere" and "always" with respect to an object of perception. But the idea of such a synthesis makes a mockery of every "real" standpoint. A real standpoint is a standpoint here and now, and not "everywhere" and "always."¹⁰

⁷ Ibid., p. 175.

⁸ John B. Carroll, Language and Thought (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1964), p. 87.

⁹ Luijpen, Ibid., p. 173.

¹⁰ Ibid., p. 129.

The realization of the prominence attached to the subject's standpoint has important consequences in the realm of the sciences.

For Aristotle, philosophy was an encyclopedia of all sciences and contained both philosophical and non-philosophical questions. With the rise of the modern empirical sciences philosophy was left to its fate, but the scientific ideal of the new sciences did not differ much from that of Aristotle. Under the guidance of Comte, hope continued to persist that ultimately it would be possible to "mirror" the whole of "reality" in one giant system of superadded sciences. Each science was expected to contribute its building block. With incredible optimism it was assumed that all blocks would neatly fit together and constitute a single harmonious whole, a mosaic. To secure this harmony, the demand was made that all sciences adopt the method of physical sciences.

This ideal of science, however, has proved to be idle. First of all, the men of science themselves began to realize that they, too, do not speak of a world-in-itself: the sciences speak of human worlds. Secondly, gradually it became evident that the physicist's typical attitude of asking questions is only one among many possible attitudes.¹¹

Few scientists are probably still thinking in terms of such a "mosaic" or "grand scheme" in which all the various sciences find their natural place. Instead, some scientists are probing the opposite direction by examining what the various disciplines have in common and how they are different. General system theory, it seems, is a label for one such a search.

What Do We Know When We Say That We Know Something?

This question, like the preceding one, is not an empirical but an a priori or conceptual question. That is,

¹¹Ibid., pp. 173-174.

an answer may be found by clarifying the concept knowing, which has been done to some extent in the previous section.

Percept and concept. "The intellectual life of man," says William James, "consists almost wholly in his substitution of a conceptual order for the perceptual order in which his experience originally comes."¹² A rigid distinction between the perceptual and conceptual order is, however, rather unfortunate. Dorothy Lee points out that the symbol, rather than a conceptual entity representing a perceived thing or quality, is "a part of a whole, a component of a field which also contains the so-called thing, as well as the process of symbolizing, and the apprehending individual."¹³ Our perceptual experience already presupposes some conceptual knowledge. According to Peter Winch,

To notice something is to identify relevant characteristics, which means that the noticer must have some concept of such characteristics; this is possible only if he is able to use some symbol according to a rule which makes it refer to those characteristics.¹⁴

The perceptual or "real" world then, derives much of its objective and external quality from the conceptual schemes through which man perceives the world.

Concepts and reality. William James pointed out

¹²William James, Some Problems of Philosophy (London: Longmans, Green, and Co., 1911), p. 51.

¹³Dorothy Lee, Freedom and Culture (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959), p. 79.

¹⁴Peter Winch, ibid., p. 58.

that we develop a mythological picture of reality that is based upon the organization and structure of language.

After people created language for practical purposes they forgot the original creativity of language. And David Elkind describes how

. . . the older child takes as self-evident, or a priori, what only a few short years before he did not know existed! Once a concept is constructed, it is immediately externalized so that it appears to the subject as a perceptually given property of the object and independent of the subject's own mental activity.¹⁵

This idea brings Ausubel to remark:

Anyone who pauses long enough to give the problem some serious thought cannot escape the conclusion that man lives in a world of concepts rather than in a world of objects, events, and situations. The reality he experiences psychologically is related only indirectly both to the physical properties of his environment and to their sensory correlates. Reality, figuratively speaking, is experienced through a conceptual or categorical filter.¹⁶

And Ausubel assumes a rather realistic view of the "real world" when he continues,

Because of the influence of concepts within his cognitive structure, man experiences a highly simplified, schematic, selective, and generalized conscious representation of reality, rather than a complete and faithful sensory representation of it.¹⁷

Thus the extent to which we can organize and express our experiences are always relative to the

¹⁵Jean Piaget, Six Psychological Studies, ed. David Elkind (New York: Vintage Books, 1968), p. xii.

¹⁶David P. Ausubel, Educational Psychology, A Cognitive View (New York: Holt, Rinehart and Winston, Inc., 1968), p. 505.

¹⁷Ibid., p. 506.

conceptual systems and frames of references available at that particular time and in that particular situation.

William James describes this process with a metaphor:

The conceptual scheme is a sort of sieve in which we try to gather up the world's contents. Most facts and relations fall through its meshes, being either too subtle or insignificant to be fixed in any conception. But whenever a physical reality is caught and identified as the same with something already conceived, it remains on the sieve, and all the predicates and relations of the conception with which it is identified become its predicates and relations too; it is subjected to the sieve's network, in other words.¹⁸

It must be added that occasionally too much may happen to fall through the sieve's meshes so that the conceptual system has to be modified, changed or discarded. The metaphor of "sieve" can readily be translated into the idea of conceptual "system" or "models."

Man is continuously shaping his experience into a whole which can be recalled readily and used in confronting and explaining new events. In this constant shaping, he borrows from everywhere--from his observations, from what he has felt and tasted, from his dreams and illusions, from his desires and dreads. After a time, it becomes all but impossible to disentangle the observed from the dreamed or the invented. But these elements together, in the forms which they have, make up a system which determines man's powers of observation and understanding. . . . The meanings which events come to have derive entirely from this system, the model of reality through which he sees the world. . . . however, characterized . . . [models or systems] are windows through which we see the world and our transactions with the world, and they make that world meaningful to us in their own terms. No man ever sees the world other than through some conceptual system, whether he is aware of this or not.

¹⁸William James, The Principles of Psychology, I (Dover Publications, Inc., 1950), p. 482.

Thus, whatever man studies, he is in fact studying some aspect of reality as it is revealed in and through the theoretical model he uses.¹⁹

So, the product of man's knowing, i.e., his reality, is predominantly situated in the concepts and conceptual schemes he uses. And, more specifically, since those concepts are always embedded in some particular political, scientific, theological, moral or social order, it follows that an individual's reality is always marked by a particular "persuasion" or "conceptual bias," which is not to say that this reality is therefore "false." A problem arises, however, when this "conceptual bias" acts as a screen preventing one from seeing different interpretations of meanings of the concepts one is using. What may be happening in this case is, that a person becomes dogmatically confident that his reality is the only correct one. In other words, "he rejects the invitation to enter into the reality of another man because that reality is, from his point of view, objectionable."²⁰

How Do We Come to Know What We Know?

The concept as metaphor. In the above paragraphs it was argued that the questions "can we know?" and "what do we know?" may be treated conceptually by clarifying the

¹⁹ Marc Belth, Education as a Discipline (Boston: Allyn and Bacon, Inc., 1965), pp. 60-61.

²⁰ Neil Postman and Charles Weingartner, Linguistics, a Revolution in Teaching (New York: Dell Publishing Co., Inc., 1966), p. 186.

terms externality, reality and knowledge. The idea of "concept" plays a crucial role in this context. Concept is itself a conceptualized entity through which the various terms related to the notion of knowledge can a priori be elucidated. Only after the basis for this root metaphor has been established may we hope to deal with the question "how do we know?" in a more empirical fashion. What has actually been done so far then, is defining the notions of externality, reality, and knowledge in terms of an epistemology of concepts, whereby the term "concept" has been used as an abstracted root metaphor. The implication of the usage of concept as metaphor forces us to realize that there is no justification for discussing the notions of reality, knowledge, and knowing in terms of concepts other than the degree of usefulness of the metaphor, that is, the degree to which it contributes to our understanding of things. Marc Belth has pointed out that every theory and every model has a metaphoric character and function,²¹ and Bernice Goldmark carries this observation to its logical conclusion by demonstrating the pursuant "mythical character" of every theory and model.²² She particularly stresses that "our metaphors, models and myths, both intellectual and aesthetic, can be evaluated

²¹Marc Belth, ibid., p. 287.

²²Bernice Goldmark, "A Myth is a Myth is . . ." Educational Theory, XVI, No. 4, (October, 1966), pp. 354-365.

and constructed, understood, but not believed."²³

This relativistic characteristic of all knowledge is often not understood, compelling people to put too much trust in their own particular viewpoint or "discovery." All the authors cited in the above paragraphs give evidence of this subtle kind of bias. Recall of the various quotations presented above enables one to note the matter of course fashion with which authors, such as Peter Winch, Marc Belth, and Ausubel present the idea of the concept as the natural basis for a theory of knowledge. The point is that each of them could very well have chosen a different kind of metaphor.

The epistemological problem is, that in studying concepts one must use the object of study as a tool in order to be able to study concepts. That is to say, we have to study the metaphor with a metaphor of that metaphor. So there is, in this sense, no vantage point from which one can see "absolutely." This admittedly sounds somewhat confusing. Korzybski deals with this kind of problem when he introduces his postulate of "self-reflexiveness." An ideal map of territory, says Korzybski, would have to include a map of itself, if the map were part of the territory. But then it would have to include the map of the map of

²³Ibid., p. 365. The problem of course is, that Bernice Goldmark has to "believe" in her own argument, in order to be able not to believe.

itself, and so on, without end.²⁴ He, therefore, establishes the principle of non-identity which in terms of concepts would mean that theoretically we may have a concept₁ about things or percepts, a concept₂ about concept₁, and a concept₃ about concept₂, and so on. In terms of human behavior this would mean that one may react to the world--in the form of conceptualizing behavior--then react to his reaction, then to the reactions of higher order, and so on.

All knowledge must ultimately be based on some presuppositions or assumptions. And in these chapters the cognitive category of concept is the unit of analysis. As a vehicle for communication and thinking the concept is a likely determinant of the nature of our systematic views of reality. Korzybski notes the implications of this view for everyday and scientific thinking:

No matter where we start, we must start with some undefined words which represent some assumptions or postulates. We see that knowledge at every stage presupposes knowledge of those undefined words. Let us call this fundamental fact the "circularity of knowledge."

Our daily speech and in very large measure our scientific language is one enormous system of such assumptions. The moment assumptions are introduced, and it is impossible to avoid them, logical destiny begins its work; and if we do not go back all the time, uncover and discover our conscious or unconscious fundamental assumptions and revise them, mental impasses permanently obstruct the way. The history of human thought gives us many examples. One single concept, one generalization, be it meaningless (dealing with non-existents) or loaded with significance, gives

²⁴Anatol Rapoport, "What Is Semantics," Classics in Semantics, eds. Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), pp. 349-350.

rise to whole systems of thought--absurd or wise. Most of the false theories in the world are not so deficient in their reasoning as in the assumptions and concepts about which they reason . . .

Our language as a whole may be regarded as a vast system of assumptions and potential doctrines with fixed logical boundaries.²⁵

Conceptual fixity. The nature of our assumptions has definite consequences for the direction of the pursuant systems of thought. Analogous to Karl Dunckers' notion of "functional fixity"²⁶ we could speak of "conceptual fixity" with reference to the idea that the direction of our thinking is largely determined by the conceptual assumptions from which we start. Something related to the notion of conceptual fixity is what Korzybski called "logical destiny" and "logical fate."

. . . [the idea that] all intellectual life is one vast (probably infinite) system of doctrines and doctrinal functions in the making, inherently governed by logical fate. As Professor Keyser has said: "choices differ but some choice of principles we must make . . . and when we have made it, we are at once bound by a destiny of consequences beyond the power of passion or will to control or modify; another choice of principles is but the election of another destiny." The disturbing and dangerous side of the question is that the great majority of mankind are unaware of the silent doctrines which govern them. They take labels, creations of their own rational will for objects, and objects for events as true constituents of nature, and they fight and die for them.²⁷

²⁵Alfred Korzybski, "Fate and Freedom," The Language of Wisdom and Folly, ed. Irving J. Lee (New York: Harper & Brothers Publishers, 1949), pp. 344-347.

²⁶David Krech and Richard S. Crutchfield, Elements of Psychology (New York: Alfred A. Knopf, 1962), pp. 372-398.

²⁷A. Korzybski, ibid., p. 348.

Chapter three will elaborate on the idea of conceptual fixity.

The concept as a sign. How is the notion of concept related to the semiotical notion of signs? Bertalanffy²⁸ characterized man as a "symbol-creating, symbol-using, and symbol-dominated animal throughout."²⁹ In Bertalanffy's semiotic scheme, symbols are a special kind of sign. According to him signs may generally be conceived as stimuli which are "meaningfully" representative of some other entity for which they "stand in." Signs may be classified into:

(1) Signals: Natural or artificial releasers of conditioned responses in Pavlovian experiments; in operant behavior after Skinner; or as factors in naturally conditioned or in instinctive behavior.

(2) Schemata: Signs of rather simple or more complex patterns, such as bee-language, mating behaviors, and so on, which function as trigger mechanisms to incite instinctive actions.

(3) Symbols: Either (a) discursive, i.e., language in a broad sense, including technical and scientific language, or (b) non-discursive, such as symbolisms through myth, art,

²⁸Ludwig von Bertalanffy, "On the Definition of the Symbol," Psychology and the Symbol, ed. Joseph R. Royce (New York: Random House, 1965), pp. 26-72.

²⁹Ibid., p. 27.

customs, rituals, music, religion, morals, and so on.³⁰

While animals may operate on the levels of signals and schemata, man is probably the only species that is capable of using all signs including symbols. Susanne Langer makes a simple dichotomous distinction between signs and symbols. Her conception of sign is related to Bertalanffy's notion of signal. "The interpretation of signs," says Susanne Langer, "is the basis of animal intelligence."³¹ Animals use signs to guide their practical activities. The difference between signs and symbols is that "the sign is something to act upon, or a means to command action; the symbol is an instrument of thought."³² And elsewhere she includes the notion of concept in her scheme:

A concept is all that a symbol really conveys. But just as quickly as the concept is symbolized to us, our own imagination dresses it up in a private, personal conception, which we can distinguish from the communicable public concept only by a process of abstraction. . . . The power of understanding symbols, i.e., of regarding everything about a sense-datum as irrelevant except a certain form that it embodies, is the most characteristic mental trait of mankind. It issues in an unconscious, spontaneous process of abstraction, which goes on all the time in the human mind: a process of recognizing the concept in any configuration given to experience, and forming a conception accordingly.³³

Every concept is characterized by a fundamental pattern

³⁰ Ibid., pp. 35-36.

³¹ Susanne K. Langer, Philosophy in a New Key (New York: The New American Library, (1942, 1951), p. 59.

³² Ibid., p. 63.

³³ Ibid., p. 70.

which enables us to talk together about the same thing when we talk about for example a "university" or simpler a "chair." Although there are personal differences of sense-experiences, feelings, and so on, our private conceptions of a "chair" or a "university" must be adequately similar or have enough in common to conceptions that other people have of the same concept. In Susanne Langer's words: "That which all adequate conceptions of an object must have in common, is the concept of the object. The same concept is embodied in a multitude of conceptions."³⁴ Probably no two people see anything just alike, but if their respective conceptions of an object (thing, event, person, situation) embody the same concept they will be able to communicate.

This formula between object, conception and concept supersedes the skeptic's or naive realist's view. A concept is not simply a universal abstraction from a "real" object internalized and shared by every single individual in the same fashion. Susanne Langer's definition of concept and conception fits our notion of knowledge and reality as a relationship quite well:

The relation between a symbol and an object, usually expressed by "S denotes O," is not a simple two-termed relation which S has to O; it is a complex affair: S is coupled, for a certain subject, with a conception that fits O, i.e., with a notion which O satisfies. . . . In an ordinary sign-function, there are three essential terms: subject, sign, and object. In denotation, which is the commonest kind of symbol-function, there have to be four: subject, symbol,

³⁴Ibid.,

conception, and object. The radical difference between sign-meaning can therefore be logically exhibited, for it rests on a difference of pattern, it is strictly a different function.³⁵

Concepts and cognition. The question now becomes whether simple sign behavior involves "knowing" (cognition) or whether this term should be reserved for the symbolizing act which essentially includes the idea of categorization or conceptualization: using concepts and forming conceptions. The standpoint one takes on this question is rather arbitrary, a matter of terms it seems. A related question, however, is, whether animals can know, that is, have knowledge and think. A biologist has the following to say:

There are certain cerebral functions that mediate between sensory input and motor output which we shall call cognitive function. The neurophysiology of cognitive function is largely unknown but its behavioral correlates are the propensity for categorizing in specific ways (extraction of similarity), capacity for problem solving, the formation of learning sets, the tendency to generalize in certain directions, or the faculty for memorizing some but not other conditions. The interaction or integrated patterns of all these different potentialities produces the cognitive specificities that have induced von Uexkuell, the forerunner of modern ethology, to propose that every species has its own world-view. The phenomenological implications of his formulation may sound oldfashioned today, but students of animal behavior cannot ignore the fact that the differences in cognitive processes (1) are empirically demonstrable and (2) are the correlates of species-specific behavior.³⁶

³⁵ Ibid., p. 64.

³⁶ Eric H. Lenneberg, Biological Foundations of Language (New York: John Wiley & Sons, Inc., 1967), p. 372.

The significance of this statement is, that it is critical of the very notions of "knowing," "cognition," or "thinking." Fitting all animal and human behavior to a single model such as "input--integrative processes--output" assumes that "knowing" in behavioral functions of species A is essentially identical with "knowing" in the behavioral functions of species B. However, should one base on this assumption a theory of "cognition" or "learning?" The S-R psychologists, for example, did not question whether the meaning of the hyphen between the S and the R is changing in different species and in different learning situations. An animal may "know" on the level of simple sign behavior while man can know on the level of symbol behavior. Man's knowing is probably never solely perception or perceiving but always involves conception and conceiving. Man's perception, it may be said, is contaminated with his ability to conceive, and this trait is species-specific. That is, man is the only animal that can conceptualize and, therefore, truly understand and misunderstand. All understanding, says Phenix,

. . . rests on a radical reduction in the multiplicity of impressions which impinge on the senses and the imagination. The infant begins life with the booming, buzzing confusion of which James spoke, and his learning consists in the growing ability to sort and select, that is, to simplify. The lower animals have built-in simplifiers in the instinctive mechanisms. But human beings have a much more interesting and powerful apparatus of simplification, through intelligence.³⁷

Human intelligence consists in the ability to conceptualize,

³⁷Philip H. Phenix, ibid., p. 134.

that is, the mental ability to sort, classify, categorize experiences according to conceptual selection mechanisms.

Says Bruner,

To categorize is to render discriminably different things equivalent, to group the objects and events and people around us into classes, and to respond to them in terms of their class membership rather than their uniqueness.³⁸

This tendency to classify is most clearly apparent in man's use of verbal concepts and conceptual rules, i.e., his language. And Lenneberg explains,

The cognitive function underlying language consists of an adaptation of a ubiquitous process (among vertebrates) of categorization and extraction of similarities. The perception and production of language may be reduced on all levels to categorization processes, including the subsuming of narrow categories under more comprehensive ones and the subdivision of comprehensive categories into more specific ones. The extraction of similarities does not only operate upon physical stimuli but also upon categories of underlying structural schemata. Words label categorization processes.³⁹

After basing his theory of cognition or knowing on the principle of conceptualization or categorization, Lenneberg proceeds to propose a language theory that is based on the following five general biological premisses which, according to Lenneberg, are "empirically verifiable."

- (1) Cognitive function is species-specific.
- (2) Specific properties of cognitive function are replicated in every member of the species.

³⁸Jerome S. Bruner, Jacqueline J. Goodnow, and George A. Austin, A Study of Thinking (New York: John Wiley & Sons, Inc., 1956), p. 1.

³⁹Eric H. Lenneberg, ibid., p. 374.

- (3) Cognitive processes and capacities are differentiated spontaneously with maturation.
- (4) At birth, man is relatively immature; certain aspects of his behavior and cognitive function emerge only during infancy.
- (5) Certain social phenomena among animals come about by spontaneous adaptation of the behavior of the growing individual to the behavior of other individuals around him [and this is also true for the phenomenon of language and forming conceptions and concepts].⁴⁰

To conclude this chapter it may be stated that man's experience of "knowing" and "knowing real things" is founded in the use of concepts; his cognitive products may be considered concepts; and the way in which he cognizes is through processes of conceptualization, which is species-specific (i.e., typically human). In the following chapters the notion of concept will be studied in the specialized setting of the educational enterprise and particularly in the area of statements pertaining to social studies curriculum objectives and rationales.

⁴⁰ Ibid., collected from pp. 371-374.

CHAPTER III

CONCEPTS GUIDE, DIRECT, LIMIT, AND DISTORT THINKING

In the preceding chapter the cognitive category of concept was established as our unit of analysis. In the present chapter three premises will be examined: the idea that (1) verbal concepts may guide our thinking, (2) verbal concepts may direct and limit our thinking, and (3) verbal concepts may distort our thinking.

It is probably impossible to "catch" the meaning of the concept "thinking" in a classical statement that would satisfy everybody. No single comprehensive definition of thinking is available. In his book The Psychology of Thinking, Robert Thomson describes a number of activities which are normally denoted by the concept of thinking.¹

- I think of being a millionaire and traveling the world. (fantasy making, daydreaming)
- I am trying to think where I lost my key. (remembering, recalling)
- I think you would have done the same in that case. (imagining, assuming, supposing)
- What do you think about politics? (holding opinions, beliefs, views)

¹Robert Thomson, The Psychology of Thinking (Penguin Books, 1963), pp. 13-17.

- Think what you are doing. (heeding, paying attention, concentrating)
- He thinks through the problem. (reasoning, reflecting, pondering)

Important for our purpose is that all these modes of thinking may occur in the classroom and that all involve the operation of concepts as specified in chapter two.

Since the notion of concept is itself a concept (as demonstrated in chapter two), it will have different meanings in different theoretical or systemic settings (This point will be elaborated in chapter five). Few authors mention this fact. Often the term concept is treated as if it were self-explanatory. Upon closer examination, however, it appears that concept has quite different denotative and connotative meanings, and that the assumptions underlying the concept of concept vary from one author to another. One way of illustrating this assertion would be to offer a list of definitions of the term concept. Some entries could be the following:

- A concept is a word that expresses an abstraction formed by generalization from particulars.
- A concept is an abstraction classified into categories.
- A concept is the label of a set of things that have something in common.
- A concept is the mental representation of something that is understood, comprehended, known as the result of a process of reflection.

- A concept is the common element or common characteristic in objects that differentiates it from other objects.
- A concept is a universal of which we are aware.
- A concept is an externalized (from the individual) perception on one end of the cognitive continuum as opposed to perception.
- A concept is a vehicle of thought.
- A concept is a network of inferences that are or may be set into play by an act of categorization.
- A concept is a dimension stated in its most basic or primitive terms.
- A concept is an abstract category that marks the extreme limits within which the word can be used.

The meaning of concept is problematic for another reason. Some authors make a rather sharp distinction between percepts and concepts,² while others consider this distinction rather artificial.³ The latter group of authors considers the connection between the mode of thinking of a person and the concepts he holds to be much more intimate than does the first group. Those who stipulate that perception antedates or occurs independently of conception could probably argue that man does not really have to be hindered by his stock of mental concepts if he only keeps close to the "real facts," i.e., to the perceived rather than the

²Such as Ausubel, Bruner, Phenix, William James.

³Authors such as Luijpen, D. Lee, P. Winch.

conceived things and events. We made our position on this issue explicit, however, in our discussion of epistemological considerations.

Most of our concepts are probably verbal concepts. That is, they are units of meaning expressed in linguistic signs. The question of the relationship between concepts and thinking can therefore easily be extended to the more general question of the relationship between language and thinking. On this issue scholars have supported any one of the following main positions: (1) Thought is dependent on language, (2) Thought is language, and (3) Language is dependent on thought. All these three statements seem to be defensible.⁴

According to Ausubel some relationship between language and thinking--and therefore between concepts and thinking--can hardly be refuted:

On purely theoretical grounds, it would be difficult indeed to deny some degree of causal relationship between such linguistic developments as symbolic representation, the mastery of syntax, the internalization of language, and the acquisition of more abstract and relational terms [or concepts] on the one hand, and such developments in cognitive functioning as the internalization of logical operations, emergence of the ability to understand and manipulate relationships between abstractions without the benefit of current or recent concrete-empirical experience, and attainment of

⁴For a concise (though rather general) position paper see James J. Jenkins, "Language and Thought," Approaches to Thought, ed. James F. Voss (Columbus, Ohio: Charles E. Merrill Publishing Co., 1969), pp. 211-237.

the capacity to think in terms of hypothetical relations between variables, on the other hand.⁵

Concepts Guide Thinking

It is agreed upon among many scholars that virtually all cognitive activity involves processes of conceptualization: abstraction, categorization and classification of experiences.⁶ All thinking is conceptual.⁷ And conversely, all operation of concepts is thinking. (See chapter two for the proper meaning of this statement).

The idea that thinking consists in the operation of concepts has important implications for students of education, since this constitutes the basis upon which theories of cognitive development and concept formation have been founded. Rather than discussing at length what is readily available in resource literature, a comparative outline of three important theories of stages in thinking and the concomitant stages in concept formation and attainment will be presented:

⁵David P. Ausubel, Educational Psychology, A Cognitive View (New York: Holt, Rinehart and Winston, Inc., 1968), p. 80.

⁶Bruner, Goodnow and Austin, ibid., p. 246. For similar statements see also writings by Eric H. Lenneberg, J. B. Carroll, Susanne K. Langer, E. Sapir, B. L. Whorf, D. P. Ausubel.

⁷However, all thinking does not necessarily require the use of "verbal" concepts. Various authors such as Susanne K. Langer, Ausubel, James and Vygotsky have argued for the occurrence of prelinguistic thinking.

<u>Piaget</u> ⁸	<u>Vygotsky</u> ⁹	<u>J. B. Carroll</u> ¹⁰
1. sensory motor, acquisition of perceptual invariants	1. the primitive associative complex	1. formation of identity and classification principles
2. preconceptual, preoperational	2. syncretic "heaps" or conglomerations	2. incubative thought free interaction of concepts
3. intuitive thought	3. the single trait chain complex	- - - - -
4. concrete operations	4. indeterminate bonds, diffuse complex	3. experimentation with concept referents
- - - - -	5. pseudo-concepts and potential concepts	- - - - -
5. propositional	6. genuine concepts	4. problem solving through hypothesis testing

Learning can be seen basically as a matter of changes in concept acquisition. Various studies have been done on the subject of concept acquisition: Bruner talks about processes of concept formation and concept attainment,¹¹ while Ausubel uses the terms concept formation and concept

⁸E. Brooks Smith, Kenneth S. Goodman and Robert Meredith, Language and Thinking in the Elementary School (New York: Holt, Rinehart and Winston, Inc., 1970), pp. 108-128.

⁹L. S. Vygotsky, Thought and Language (Cambridge, Mass.: The M.I.T. Press, 1962), pp. 52-81.

¹⁰John B. Carroll, ibid., pp. 75-88.

¹¹Bruner, Goodnow and Austin, ibid.

assimilation.¹² Ausubel discusses concept acquisition in terms of types of learning: reception learning, discovery learning, rote learning and meaningful learning set. And Bruner studied selection strategies of concept acquisition--such as conservative focusing, focus gambling, successive scanning--in relation to three types of concepts: conjunctive, disjunctive, and relational concepts.

A great number of interesting studies on concept acquisition are readily available through general educational or research literature. Important for our discussion is that all these inquiries are based on the premise that cognitive functioning is made possible and guided by the operation of concepts. Any educator who makes use of the notion of concepts as an instrument to facilitate teaching and learning of curriculum material should be familiar with some of the main didactical principles derived from these studies. Since there is no place in this chapter to include a review of the literature on problems of concept acquisition, some main principles relevant to the social studies curriculum are listed below.¹³

- Any concept may didactically be considered as the

¹²David P. Ausubel, The Psychology of Meaningful Verbal Learning (New York: Grune and Stratton, 1963). And David P. Ausubel, (1968), ibid.

¹³Many of these principles are paraphrased from D. P. Ausubel (1963), ibid., and (1968), ibid.; from J. S. Bruner, The Process of Education (Cambridge, Mass.: Harvard University Press, 1960); and from J. B. Carroll, (1964), ibid.

internal representation of some kind of experience.

- A student gives evidence of his mastery of a concept if he can discriminate between positive and negative instances of that concept.

- Grasping the structure of a subject is understanding how the concepts making up the structure are related.

- Concept learning is facilitated when the concepts are meaningfully structured.

- Transfer of learning and advanced learning are enhanced when emphasis is given to basic concepts and relations among these concepts.

- Structure poses the question of relevance and relationship of newly presented concepts to already established ones.

- Meaningful learning involves the organizing or structuring of various concepts into conceptual schemes or systems that can be used to interpret phenomena, generate ideas, and raise questions which lead to new interpretations and insights.

- Reconciliation and differentiation is necessary to solve discrepancies or conflicts between new concepts and the cognitive structure which characterizes the learner.

- Higher level concepts should be furnished with sufficient encounters with lower level (less abstract) concepts.

- The method of concept presentation has to be considered in the light of a personal frame of reference which is consonant with the learner's experiential background, vocabulary

and structure of ideas.

- Synthesis of seemingly incompatible concepts through a reorganization of the learner's existing knowledge and related general explanatory principles may sometimes be necessary.

Concepts Direct and Limit Thinking

The point has been made in chapter two that none of the traditional epistemological arguments suffice in explaining man's knowing of the world of external things. Man organizes his experiences in terms of conceptual categories and through processes of conceptualization. He cannot otherwise arrive at organized knowledge of the world. Bruner explains:

The categories in terms of which we group the events of the world around us are constructions or inventions. The class of prime numbers, animal species, the huge range of colors dumped into the category "blue," squares and circles: all of these are inventions and not "discoveries." They do not "exist" in the environment. The objects of the environment provide the cues or features on which our groupings may be based, but they provide cues that could serve for many groupings other than the ones we make. We select and utilize certain cues rather than others.¹⁴

And Neil Postman notes,

On the basis of investigations conducted so far, the statement "Nothing is anything until you call it something and then it "is" whatever you call it," could be well defended. Conversely, it is most difficult, if not impossible, to see "something" for which we do not have a name.¹⁵

¹⁴ Bruner et al., (1956), ibid., p. 232.

¹⁵ Neil Postman et al., (1966), ibid., p. 203.

Van den Berg in his introduction to Persoon en Wereld¹⁶ (Person and World), tells about a native from the jungles of Malakka, who was suddenly brought into the metropolis of Singapore. The sense experiences must have been overwhelming for this primitive mind. There were huge buildings, airplanes, cars, trains--everything a big city displays. How did this man react under the flood of "stimuli?" One found that all that the native could clearly recall, in fact, all that had really astounded him, was how this streetvendor "could carry so many bananas at a time." Evidently, the only thing that must have been a familiar sight for the native was somebody carrying bananas. He did not "see" anything else. The jungle habitant had no conception of any of the technological miracles he had seen. He did not "really see" them simply because they did not mean anything to him.

It has also been noted in chapter two that the cognitive category of concept is itself a product of man's intellect. It appeared that concept is at once the producer and the product of cognition. To shift the metaphor, the concept is at once the spectacles through which we are looking and the spectacles for which we are looking. The concept as producer of knowledge is the analytical tool we use in order to be able to deal with our environment effectively and systematically. It must be remembered, however, that any particular concept we make use of is

¹⁶J. H. van den Berg en J. Linschoten (eds.), Persoon en Wereld (Utrecht: Erven J. Bijleveld, 1963).

always based upon some defined or undefined assumptions or presuppositions (see chapter two, pp. 22-23). This means that every concept is always conceptually biased and will exert a certain directional and limiting influence upon the cognitive processes--depending on the semantic or systemic characteristics of the concept.

For the social studies teacher this means that he must always be aware of the presuppositions underlying the concepts he wishes to introduce in the curriculum. Are these presuppositions restrictive for an open and unprejudiced inquiry into social science problems? They almost certainly are. It simply cannot be helped. The point, however, is, that an understanding of the influential nature of the concepts we use is likely to broaden our view, to open our mind for a tolerant inquiry into alternative arguments led by rival or counter-concepts.

How problematic it is to realize such a ruling may be illustrated with the curriculum plans designed by Newman, Oliver and Shaver of the Harvard Social Studies Project.¹⁷ These authors propose a teaching of the social studies through the analysis of "Public Controversy." Rather than teaching pre-packaged concepts and structured pieces of knowledge, they favor an open inquiry into social science problems through the study of concepts derived from any or

¹⁷Donald W. Oliver and James P. Shaver, Teaching Public Issues in the High School (Boston: Houghton Mifflin Company, 1966).

all of the social science disciplines. Newman, Oliver and Shaver are careful to base their curriculum proposal on an "explicit concept of citizenship education," and an "identifiable social theory." And this is exactly where the Harvard Social Studies Project becomes problematic. Teaching social studies through open inquiry into public controversy sounds exciting, but then take notice of the restrictive clause: "the curriculum accepts the American Creed as a legitimate value framework," and the student "must be committed to the basic ideals of American society emerging from the democratic tradition of Western civilization." Hereafter, the authors continue to introduce the basic concepts (analytical tools) which are supposed to provide open access to an unbiased study of public controversial issues. "Standards to serve as a basic vocabulary for the debate of public issues"¹⁸ include concepts such as: property rights, individual autonomy, community welfare, equal opportunity, pluralism, liberty of property, national security, majority rule, and minority rights. However, concepts such as these are controversial themselves. That is, they must be studied for an adequate assessment of the various assumptions and ambiguous meanings they acquire within the framework of "the American Creed," and the general ideology of American society. Students guided by the basic concepts--as set out by Oliver and Shaver--will certainly be influenced and

¹⁸Ibid., p. 15.

restricted in the ways they may approach, understand and "solve" so-called problems of public controversy.

We may use the term "conceptual fixity" for the idea that the conceptual categories into which we become socialized--through school and other learning--in turn determine the way in which people tend to experience reality (see chapter two, pp. 19-23), perceive problems and find the possible solutions to these problems. Of course the idea is not new. William James had already remarked that concepts steer us in our activities, whether physical or mental, by providing an immense map of relations among the elements of things. And the map which the mind frames out of them possesses, once it has been framed, an independent existence.¹⁹

The thesis that the concepts we hold tend to fix the direction and scope of our thinking can probably theoretically be tested, although little or no comparative studies have been done in this area. On the more general level of comparative linguistics similar studies do exist. Different languages tend to follow different methods in building up categorical systems. This has certain cultural and psychological consequences which have come to be known as the Whorf-Sapir hypothesis. Says Neil Postman,

In its simplest terms, Whorf's hypothesis states that the structure of the language one uses "shapes" not only how one thinks, but what one can think about. In this view, language is not merely a vehicle for

¹⁹ William James, Some Problems in Philosophy (London: Longmans, Green, and Co., 1911), pp. 73-74.

expressing thought, it is also the driver. Or, to shift the metaphor, language is related to thought in somewhat the way in which a musical instrument is related to the sound it makes. No matter how various are the tunes one can play, the instrument one uses limits what can be played. You cannot make the sound of a rolling drum on a clarinet. You cannot make the sound of a trumpet on a violin. Thus, the "tune" that you call "thinking" is the product of the structure of your particular language instrument.²⁰

. . . we all, unknowingly, project the linguistic relationships of a particular language upon the universe, and see them there . . . We say "see that wave"--the same pattern as "see that house." But without the projection of language no one ever saw a single wave. We see a surface in everchanging undulating motions. Some languages cannot say "a wave;" they are closer to reality in this respect. Hopi say walatata, "plural waving occurs," and can call attention to one place in the waving just as we can. But since actually a wave cannot exist by itself, the form which corresponds to our singular, wala, is not the equivalent of English "a wave," but means "a slosh occurs," as when a vessel of liquid is suddenly jarred.²¹

The problem with the Whorf-Sapir hypothesis is, that the term "language" acquires ambiguous overtones. One wonders what exactly it refers to. Whorf proposed to structurally analyze and compare languages on the basis of a number of linguistic categories. For our purpose, however, it would be quite interesting to substitute in the following quotations the term "concept" for the term "language" wherever this seems possible, and observe its effects. What we are actually doing then, is translating the Whorfian thesis into the premise of "conceptual fixity," as elaborated above.

²⁰Neil Postman and Charles Weingartner, (1966), ibid., p. 198.

²¹Ibid., quoted from B. L. Whorf, pp. 199-200.

In the following rather lengthy quotations the original text will be bracketed off and replaced by our capitalized terms.

Actually, thinking is most mysterious, and by far the greatest light upon it that we have is thrown by the study of CONCEPTS (language). . . . the forms of a person's thoughts are controlled by inexorable laws of pattern of which he is unconscious. These patterns are the unperceived intricate systematizations of his own CONCEPTUAL SCHEMES (language). . . . His thinking itself is a CONCEPTUAL PROCESS (language). . . . And every CONCEPTUAL SYSTEM (language) is a vast pattern-system, different from others, in which are CONCEPTUALLY (culturally) ordained the forms and categories by which the personality not only communicates, but also analyzes nature, notices or neglects types of relationships and phenomena, channels his reasoning, and builds the house of his consciousness.²²

Sapir, the co-author of the Whorf-Sapir hypothesis emphasizes the power language (i.e., concepts) has in determining the perceived shape of our real world, an issue that has already been touched upon in chapter two.

. . . the "real world" is to a large extent unconsciously built up on the CONCEPTUAL STRUCTURES (language habits) of the group. . . . We see and hear and otherwise experience very largely as we do because the CONCEPTUAL THINKING (language habits) of our community predispose certain choices of interpretation.²³

The substitution exercise will be applied to one more case:

Most persons are quite unaware of their dependence on CONCEPTS (language) and their subservience to it. This is because CONCEPTS ARE (language is) not only the means of almost all communication, but also the most elemental, omnipresent, inescapable, and powerful

²²Benjamin Lee Whorf, Language, Thought, and Reality (New York: John Wiley & Sons, Inc., 1956), p. 252.

²³Edward Sapir, quoted in B. L. Whorf, (1956), p. 134.

conditioning, shaping, even determining agency. THE CONCEPTUAL APPARATUS (Language) . . . is an institutionalized system . . . into which they unconsciously fit, just as they fit into the determining patterns of the previously existing economic or political order. Each CONCEPTUAL SYSTEM (language) operates as an instrument which guides its habitual users in observing, reacting and expressing themselves. It provides for . . . a combination of attitudinal atmosphere and conceptual platform, which is spoken of commonly as their *Weltanschauung*. Each CONCEPTUAL ORDER (language) "marks off" for its . . . [users] all of their "working" interpretations of reality--their interpretation of what they comprehend as essences, things, forms, processes, actions, time and temporal sequence, space and distance, quantities and qualities, and the manner in which they comprehend these. In considerable part, it provides . . . [its users] as members of a CONCEPTUAL (linguistic), and hence, of a common INTELLECTUAL (cultural) community, with what they are aware of, what they imagine, believe, and feel, their ideas--in short what they think about and the way they think. It carries for its . . . [users] their connotations and interpretations of what is²⁴ existential, important and valuable in the universe.

In general educators seem to believe that concepts channel and limit our thinking and understanding of things. If this were not true, educators and especially curriculum workers would not be so enticed to teach some concepts rather than "others" when they want the students to be able to perform certain specific cognitive tasks. A teacher does not usually test his students' concept knowledge beyond the reasonable limits within which the concept operates. Although some educators would probably raise objections against the idea of the concept as a determinant factor for thinking, they all probably act as if they believed in the premise.

²⁴ Joyce O. Hertzler, A Sociology of Language (New York: Random House, 1965) p. 118.

And, of course, this is not only true for educators. Judging from the penalties the government invoked under the "War Measures Act" against anyone who made public writings from the F.L.Q. manifesto or other leftist ideas, verbal concepts are believed to have a very powerful influence indeed. An open discussion of the "real issues" could have persuaded many Canadians to look at the crisis from a different perspective--that is, from a different conceptual framework (see p. 19). The government's censorship during the F.L.Q. crisis certainly had a biased and restrictive influence upon the public's understanding of things. As an educator, one also wonders what "went on" in the nation's social studies classrooms.

The bearing of this chapter for the social studies curriculum is, as we said, very important. We noted earlier that one has to be extremely cautious in selecting the concepts which we wish to include in the curriculum. In fact we have to be conscious of our own selection principles, which are determined to some extent at least by the concepts we are characterized by ourselves. A "Liberal" social studies teacher is likely to introduce concepts fitting his particular scheme in confronting societal problems. And a "Marxist" social studies teacher would probably do the same within his frame of reference. The concepts we carry tend to determine our outlook and this outlook is transferred to the students via the concepts we--as curriculum workers and teachers--select. The point is, that our outlook or the way

we tend to observe things is selective. And the selection is dependent upon concepts and modes of conceptualization that do already exist prior to the observation. According to Peter Winch,

To notice something is to identify relevant characteristics, which means that the noticer must have some concept of such characteristics; this is possible only if he is able to use some symbol according to a rule which makes it refer to those characteristics.²⁵

It was just noted that having acquired certain concepts implies that one is looking from a certain perspective. Robert Merton describes the concept of perspective as "the manner in which one views an object, what one perceives in it, and how one construes it in his thinking."²⁶ And with reference to the conceptual aspect of thinking, perspective may be described in terms of:

- (a) the meaning of the concepts being used
- (b) the phenomenon of the counter-concepts
- (c) the absence of certain concepts
- (d) the structure of the categorical apparatus
- (e) dominant models of thought
- (f) level of abstraction
- (g) the ontology that is presupposed²⁷

The concept of perspective is often used rather vaguely and ambiguously. The advantage of "translating" a person's perspective into the kinds of concepts that he is characterized by no doubt illuminates the term and brings it within

²⁵Peter Winch, (1958), ibid., p. 85.

²⁶Quoted from Karl Mannheim by Robert K. Merton, Social Theory and Social Structure (New York: The Free Press, 1968 Enlarged Edition), p. 559.

²⁷Ibid.

reach of empirical research.

Open-minded individuals tend to score higher than closed-minded individuals on tests of verbal ability and ability to form remote verbal associations.²⁸ J. McV. Hunt suggested that a large amount of prior experience in a given area promotes a positive orientation to novel situations, whereas little prior experience in the same area is more likely to lead to withdrawal.²⁹ Within the context of concepts and related cognitive structures it could be postulated that open-mindedness is a function of the availability of concepts--i.e., cognitive experiences--embedded in broader or alternative theories. This is a relationship that could probably be tested empirically. One of the major conclusions that Rokeach arrived at from his study of open- and closed-minded belief systems is that people strongly tend to "organize the world of ideas, people, and authority basically along lines of belief congruence. What is not congruent is further organized in terms of similarity to what is congruent."³⁰ Similar ideas have been expressed by Festinger who talks about cognitive dissonance between two elements in a system and the ways people try to reduce such dissonance.³¹ And Heider talks about structural imbalance that motivates the

²⁸For a review of research literature see Ausubel, (1968), ibid., p. 173.

²⁹Ibid.

³⁰Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960), p. 395.

³¹Ibid.

individual to strive toward structural balance.³² It is interesting that these views would be very compatible with the notion of conceptual fixity--the premise that an individual's repertoire of concepts, and relations between concepts tends to determine the direction of his further conceptualizations. An individual's thinking is inclined to operate selectively, not only to alleviate cognitive dissonance or to strike a structural balance, but simply because the integrated "stock" and meanings of his conceptual inventory function selectively upon new cognitive experiences and explorations.

Concepts Distort Thinking

The third premise under discussion follows logically from the preceding one. If the concepts one holds tend to influence the person's thinking in a directive and restrictive fashion, then one can expect that some of this influence may be "ill-directed" and "cripple" rather than facilitate the individual's understanding of things. Just as the concepts people use, demonstrate how they interpret their various experiences, so these concepts may also be indicative of people's fallacious beliefs, their prejudices, superstitions, and erroneous views.

One argument is, that the distorting tendency of language rests in the alleged "gap" that exists between language and reality. According to this view language--

³²Ibid.

and by implication verbal concepts--necessarily misrepresents what is real as a result of the inherent crudity of the linguistic instrument with which people try to "catch" the subtle intricacies of the external world.

Another argument maintains that language indeed distorts but that such linguistic disabilities as ambiguity, vagueness, defective definition, and inadequate terminologies are at least in principle capable of correction. A somewhat different route is chosen in the attempts to "close" the alleged gap between language and reality. To this end endeavors have been undertaken to construct some sort of metalanguage that is "human or error proof," i.e., language that could not "deceive" if it were only applied properly.³³ Some recent developments which involve the translating of social science data into "objective" (mathematical) language symbols may be interpreted in this fashion.³⁴

From the epistemological perspective expounded in chapter two it appears, however, that the idea of a gap between language and reality rests on an unfortunate conception of both terms. Neither ordinary nor scientific language is an instrument designed to duplicate reality. It is indeed

³³An interesting discussion of the attempts for linguistic review is to be found in chapter six of Max Black, The Labyrinth of Language (New York: Frederick A. Praeger, 1968).

³⁴Examples are Information Theory and Decision Theory. Bertalanffy remarked: "Information Theory, highly developed mathematically, proved disappointing in psychology and sociology." Ludwig von Bertalanffy, General System Theory (New York: George Braziller, Inc., 1968), pp. 22-23.

a puzzling idea that one could know that concepts distort reality. This presupposes that one can "know" what the true nature of reality is without having concepts of it. Within the framework of our argument, however, there is no human knowledge or thinking without concepts. One can therefore agree with Max Black when he states:

We must, in truth, abandon all hope of modeling language upon a Reality that can be independently scrutinized without the assistance of thought and language. For better or worse, men, as soon as they can think at all, are committed to thinking in words [better: to thinking in concepts]; to bewail this or to view it with alarm is to lament the existence of thought itself. Perhaps Reality with a capital R will always elude us; but there is no need, quite the contrary, to suppose therefore that we are in any way prevented from exploring the nature of any number of realities (with a small r). Nor need the improvement of language, of urgent practical importance as that is, wait upon the resolution of metaphysical problems.³⁵

The idea then, that the concepts one holds may "mislead" the person in his thinking is not due to the metaphysical character of reality or language, but rather to the way concepts are being used. It has often been remarked how concepts may distort a person's understanding of things, because they are, wittingly or unwittingly, being "misused" or "abused." According to Ogden:

. . . it is perhaps hardly realized how widespread is the habit of using the power of words not only for bona fide communications, but also as a method of misdirection; and in the world as it is today the naive interpreter is likely on many occasions to be seriously misled if the existence of this unpleasing trait--equally prevalent amongst the classes and the masses without distinction

³⁵Ibid., p. 121.

of race, creed, sex or colour--is overlooked.³⁶

There are various ways in which concepts may "act pathologically"³⁷ and thus misdirect a person's thinking. In fact, a number of pitfalls have already been implicitly touched upon in the preceding pages and more instances will be mentioned in what follows.

It could probably be argued that there are potential pitfalls hidden in every possible way we can approach, describe or specify the notion of concept: in the epistemological genesis of concepts; in its abstracting function; in its function in thinking; in the role of concept in scientific theory or more simple categorical systems; in its ways of acquiring denotative and connotative meaning.

For example, it has been pointed out in the early discussion of this paper that there is danger in taking the notion of concept as something indubitable or as a "natural fact." One could easily forget that concept is itself a metaphor--or rather a second order metaphor--and characterized by certain presuppositions. The idea of concept is a

³⁶C. K. Ogden and I. A. Richards, "Thoughts, Words and Things," Classics in Semantics, eds. Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), p. 258.

³⁷Of course it could be pointed out that to speak of a pathology of concepts is an anthropomorphization and therefore a form of concept misuse. However, one should be able to differentiate between "a manner of speaking" and real conceptual misuse. It has been made clear that concepts are always human inventions and they can "act pathologically or deceptively" because of the use human beings make of them.

human invention designed to render the processes of cognition intelligible.

It has further been argued that every concept has its genesis probably in a root metaphor. The danger inherent in this observation is, that some concepts may have lost contact with their root metaphor. They subsequently turn into empty abstractions, and become names with a "cosmic glow about them" such as "substance, matter, mind, spirit, God, ego, consciousness, essence, identity, phlogiston, ether, force, energy, magnetism."³⁸ Often these concepts are resorted to in order to "explain" phenomena which cannot otherwise be explained, or to ascribe "special meanings" to events or situations. Stephen Pepper reserved the name hypostatization for this tendency of fallacious conceptualization. An interesting text has been quoted by Marcuse. In this example hypostatized universals are translated into concreteness:

They believe they are dying for the Class, they die for the Party Boys. They believe they are dying for the Fatherland, they die for the Industrialists. They believe they are dying for the Freedom of the Person, they die for the Freedom of the dividends. They believe they are dying for the Proletariat, they die for its Bureaucracy. They believe they are dying by orders of a State, they die for the money which holds the State. They believe they are dying for a Nation, they die for the bandits that gag it.

³⁸ Stephen Pepper, World Hypotheses (Berkeley, Calif.: University of California Press, 1961), p. 113.

They believe--but why would one believe in such darkness? Believe--die?--when it is a matter of learning to live?³⁹

The implicit question for the social studies teacher is: How much reality can one give to such social science concepts as "government" and "state" in teaching students national and international affairs? The student may hear his Prime Minister say that "inflation is not good for Canada," or that "full employment is not good for Canada either." And the student should be able to consider whether the term "Canada" becomes a hypostatized term, and if so, why it may be good strategy for a politician to talk in this fashion.

If the teacher wishes to make the student aware of the deceptive roles concepts may play, he has to teach the student not only to look through concepts but at the same time to look at them. This requires probably a considerable amount of discipline since it is easy to take for granted the concepts and conceptual systems one uses. It is like wearing spectacles and finally forgetting that it is through spectacles that one is looking. As Susanne Langer pointed out, concepts "have to be supported by a vast intellectual structure in order to function so smoothly that we are almost unaware of them."⁴⁰

³⁹Herbert Marcuse, One-Dimensional Man (Boston: Beacon Press, 1968), p. 207.

⁴⁰Susanne Langer, (1951), ibid., p. 239.

Because they do fit so neatly into the frame of our ultimate world-picture, we can think with them and do not have to think about them; but our full apprehension of them is only suppressed. They wear a "cap of invisibility" when, like good servants, they perform their tasks for our convenience without being evident in themselves. Yet all our signs and symbols were gathered from sensuous and emotional experience and bear the marks of their origin--perhaps a remote historical origin. Though we ordinarily see things only with the economy of practical vision, we can look at them instead of through them, and then their suppressed forms and their unusual meanings emerge for us.⁴¹

It has been noted above that students become socialized into certain conceptual schemes and orders. That is, they are being introduced to participate in a kind or mode of thinking that already went on before them. The learner finds himself in an inherited situation with patterns of thought which--to a large extent--constitute a ready-made situation.⁴² Nevertheless, each particular individual has to form his own conceptions in this learning process. That is, he must form abstractions and internalize concepts from his learning experiences. What does it mean for the student to form abstractions? Are concepts "invented" (as Beyer and Penna point out) by the students in their task "to order experience?"⁴³ What is the nature of this "discovery" or "invention" of curriculum concepts that supposedly goes on

⁴¹Ibid.

⁴²Karl Mannheim, Ideology and Utopia (New York: Harcourt, Brace & World, Inc., 1936), p. 3.

⁴³Barry K. Beyer and Anthony N. Penna, Concepts in the Social Studies, National Council for the Social Studies, Bulletin No. 45, p. 29 and p. 43.

in school? The following text may throw some light on these questions.

If one is asked to describe the concept of the animal, of gas, of theft, one might be tempted to seek the common characteristics of all things which are called animals, of all the bodies which are called gases, of all the actions which are called thefts. Whether this is successful; whether this means of concept formation is practicable, is another question; it might be plausible, if we could assume that there is no doubt as to what should be called animal, gas, theft--i.e., if we already have the concept we are seeking. Thus any attempt to form a concept by abstraction is tantamount to looking for the spectacles which are on your nose, with the help of these same spectacles.⁴⁴

It seems that this statement is critical of the celebrated "discovery method." The discovery method becomes a "search" for the meaning and significant relations of concepts which were already defined in terms of established meanings and significant relations. We ask the student to "invent" or "discover" for himself what is already an established and meaningful article of the total cultural inventory of concepts.⁴⁵ The philosophy of the discovery method seems to be based on some dangerous assumption, namely that the student can do on his own, what took mankind thousands of years: building up concepts and conceptual systems through the processes of original (but tiresome!) conceptualization

⁴⁴Ch. v. Sigwart, Logik (2d. rev. ed. Freiburg i.b., Mohr & Siebeck, 1889-93), I, p. 320 ff. Quoted in Ernst Cassirer, The Philosophy of Symbolic Forms, Vol. I (New Haven: Yale University Press, 1957), p. 279.

⁴⁵For the idea of language as a cultural inventory or a cultural index see Joyce O. Hertzler, (1965), ibid.

which are always on the fringes of man's knowing. Scientific "discovery" though spontaneous and original concept formation is possible but probably very rare. Most concepts people form or attain, are acquired through systematic or nonsystematic learning; and these concepts are readily available through the cultural inventory of concepts in the form of disciplined and nondisciplined bodies of knowledge.

Any cultural inventory of concepts itself is likely to be biased in some way. Although Rapoport's use of the term "fact" is somewhat ambiguous he probably makes a point when he states:

All existing cultures are based partly on true-to-fact orientations. A tribe may have highly efficient fishing and canoe-building techniques, but its notions of health and disease may be organized into a body of superstition, which renders it helpless in an epidemic. Our own culture has attained a high level of true-to-fact orientation with regard to technology and hygiene, but our social organization is such that technology threatens to blast us out of existence, and a great deal of knowledge of health (especially mental health) cannot be applied.⁴⁶

The deceptive character of concepts may rest in the simple misapplication of the naming or label function of terms or words. This kind of misuse may be the result of sheer ignorance as to the commonly accepted meaning of a concept, or otherwise of conceptual ambiguity or confusion.

Furthermore, people take it too easily for granted that their private conceptions (denotatively as well as connotatively) coincide with those of their fellow men.

⁴⁶Anatol Rapoport, (1965), ibid., p. 351.

An individual's personal conceptions are always in some respect idiosyncratic and never exactly the same as those of other individuals. In Ogden's words:

Normally, whenever we hear anything said we spring spontaneously to an immediate conclusion, namely, that the speaker is referring to what we should be referring to were we speaking the words ourselves.⁴⁷

Thus, concept misuse may simply be the result of our own inability to communicate the "proper" denotative or connotive meanings of the term. This type of conceptual pathology may be greatly reduced by a careful specifying and defining of the meanings one assigns to terms.

Especially for educators it is important that the concepts contained in the rationales and objectives of curricula are always clearly specified in terms of their meanings. Only if concept meanings are elucidated unequivocally can one hope to be able to communicate effectively about the curriculum objectives containing the concepts. In chapter four this point will be elaborated upon.

But even if one does apply his verbal concepts properly the person may still be conceptually misled by the fact that the concept itself tends to fix his perceptions and consequently his thought and behavior. We used the term conceptual fixity for the phenomenon that to a certain extent the concept defines and structures a person's situation and experience. Explicit conceptual analysis,

⁴⁷C. K. Ogden and I. A. Richards, (1965), ibid., p. 255.

therefore, may reveal the presuppositions and underlying assumptions of a concept or conceptual system. The job is, says Robert Merton, "to identify conceptual lag and to liberate ourselves from the patterns of cognitive misbehavior which it tends to produce."⁴⁸ Schopenhauer once stated that:

It would be a very good thing if every trick could receive some short and obviously appropriate name, so that when a man used this or that particular trick, he could at once be reproved for it.⁴⁹

This is more or less what is attempted in the final chapter of this paper. A paradigm that lists a large number of cases of concept misuse is synthesized. Some cases clearly follow from the discussion on the epistemology of concepts: hypostatization, reification, "empty or fake" concepts, anthropomorphization of concepts, the question of implicit assumptions, and tautological use of concepts. Other cases are related to the discussion on concepts and thinking: conflicting perspectives, misuse of process and product concepts, cultural bias, conceptual fixity, manipulative techniques, intentional interpretation, and misapplication of concepts through ignorance. Other instances of concept misuse again follow from the chapter on specification of meaning: magical use of concepts, the attempts to oversimplify, emotive bias, professional jargon, overgeneralization, and "stretching the meaning" of concepts. And a

⁴⁸Robert K. Merton, (1968), ibid., p. 146.

⁴⁹Max Black, Critical Thinking (New York: Prentice-Hall, Inc., 1946).

last group is related to the discussion on the roles of concepts in cognitive systems: category mistake, functional ambiguity, and ideological prejudice.

CHAPTER IV

SPECIFICATIONS OF MEANING AS AN INSTRUMENT FOR CONCEPTUAL CLARIFICATION

Educational Objectives Need Clarification

Teaching a set of social studies objectives can, in principle, always be translated into teaching a set of social studies concepts. Clarifying and determining the meaning of educational objectives, and therefore of concepts and relations between concepts, is a necessary task in the construction of social studies curricula. It is not an activity that can be satisfactorily dealt with simply by following a "hunch" or one's "intuition." In this chapter various strategies for specifying concept meaning are examined. At the same time an attempt is made to relate this discussion to Bloom's Taxonomy of Educational Objectives.¹ Comparing Bloom's categories with the various strategies of meaning analysis enables one to see in terms of cognitive processes what kind of meaning is generated by following any particular method for specification of concept meaning.

Concepts inadequately clarified may easily lead to inadequate understanding. In an endeavor to contribute to the clarification of concepts the following questions are

¹Benjamin S. Bloom, Taxonomy of Educational Objectives (New York: David McKay Company, Inc., 1968).

entertained: What does it mean to say that some verbal concept has meaning? And how do we determine the meaning and meaningfulness of this concept?

The Meaning of Word Meanings

The concept "meaning" is itself a rather ambiguous term because of its wide range of applicability. Meaning can refer to various aspects of words such as: connotation, signification, causation, intention, purpose, interpretation, evaluation, emotion, experience, action, or all of these. Susanne Langer simplifies the problem of word meanings by making a conceptual distinction between signs and symbols (see chapter two). She points out that there are two basic functions of terms that may be said to have meaning "for a significant sound, gesture, thing, event, may be either a sign or a symbol."² She points out further that the difference between signs and symbols is that "the sign is something to act upon, or a means to command action; the symbol is an instrument of thought."³ Distinguishing word meaning into signs and symbols has the advantage of illuminating such notions as the "processes of conceptualization" and the contrast of human and subhuman language. Langer provides insight into the meaning of meaning by counterposing the notions of signification and conception:

²Susanne K. Langer, Philosophy in a New Key (New York: The New American Library, (1942, 1951), p. 58.

³Ibid., p. 63.

The simplest kind of symbolistic meaning is probably that which belongs to proper names. A personal name evokes a conception of something given as a unit in the subject's experience, something concrete and therefore easy to recall in imagination. Because the name belongs to a notion so obviously and unequivocally derived from an individual, it is often supposed to "mean" that object as a sign would "mean" it. This belief is reinforced by the fact that a name borne by a living person, and a call-name by which we signal him are usually identical. Through a confusion of these two functions, the proper name is often deemed the bridge from animal semantic, or sign-using, to human language, which is symbol-using. Dogs, we are told, understand names--not only their own, but their masters'. So they do, indeed; but they understand them only in the capacity of call-names. If you say "James" to a dog whose master bears that name, the dog will interpret the sound as a sign, and look for James. Say it to a person who knows somebody called thus, and he will ask: "What about James?" That simple question is forever beyond the dog; signification is the only meaning a name can have for him--a meaning which the master's name shares with the master's smell, with his footfall, and his characteristic ring of the doorbell. In a human being, however, the name evokes the conception of a certain man so called, and prepares the mind for further conceptions in which the notion of that man figures; therefore, the human being naturally asks: "What about James?"⁴

To say that a word is charged with meaning is to say that a symbol is associated with a conception--a cognitive internalized piece of experience with things from our environment.

In talking about things we have conceptions of them, not the things themselves; and it is the conceptions, not the things, that symbols directly "mean." Behavior toward conceptions is what words normally evoke; this is the typical process of thinking.⁵

Of course, words "mean" nothing by themselves; meaning

⁴Ibid., p. 61-62.

⁵Ibid., p. 61.

resides not in words but in people.⁶ People assign or ascribe meaning to terms. We do not "get" meaning from words but we "give" it to them. In order for a verbal sign or symbol to have meaning it must always be a sign or symbol to someone. That is to say, the meaning of a verbal concept must always be related to some kind of experience, or better, someone's experience. Dorothy Lee noted the didactical significance of the above:

The symbol gets its meaning through participation in the concrete situation; and it grows in meaning, and even changes in meaning, with each participation. Before it functions in individual experience, it holds no meaning. To the child who hears a word for the first time, the word contains the meaning of the situation in which he hears it, including the mother's tone of voice, her gestures and facial expression. To someone learning the use of a word from a dictionary or from a classroom definition, the word holds only whatever value is present in this situation; probably none. But once the individual uses the newly learned word, once a concrete situation is experienced through the agency of the word, the word contains the value of this symbolized situation.⁷

Strategies of Meaning Analysis

"Since all knowledge must be set forth in language," says William Beck, "it is the meaning we give to language which confers upon knowledge its weight and ambiguity."⁸ The manner in which we confer meaning to the verbal concepts we

⁶Neil Postman and Charles Weingartner, Linguistics, a Revolution in Teaching (New York: Dell Publishing Co., Inc., 1966), p. 136.

⁷Dorothy Lee, Freedom and Culture (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959), p. 85.

⁸William S. Beck, quoted by N. Postman, 1966, p. 133.

hold must therefore be related to the nature of the knowledge we arrive at. A concept may be visualized as being situated at the crossroads of a number of routes or methods of analyses upon which the type and formulation of meaning is dependent. Different theories of meaning lead to different ways in which the meaning of a concept may be perceived. The concept "appears" differently if highlighted from a different theoretical direction. This chapter examines--albeit in a rather concise and summary fashion--what techniques of clarification and elucidation might suit our purposes.

(A) Ostensive definition:⁹ Words all have meaning in the simple sense that they are symbols which stand for something other than themselves. To ask what a certain concept means is to ask for its referent, a thing or event. The meaning of a concept is thus situated in or identified with that to which it refers. This theory is often called the "picture theory of meaning," a label attached to the philosophical system of Bertrand Russell and to the early thoughts of Ludwig Wittgenstein.

In this sense clarification of a concept involves demonstration by providing concrete examples and empirical instances. Defining a concept ostensively consists in pointing at and showing, rather than an intellectualist or

⁹The term "definition" is used in a loose sense, referring here and in the following sections to any procedure of specifying meaning.

abstract-verbal describing or explaining of the concept to be clarified. The distinction between extensional and intensional meaning is also exemplary in this context. In Language in Thought and Action, Hayakawa defines the difference between the extensional meaning and the intensional meaning of a verbal concept, as that which the symbol "points to or denotes in the extensional world" and that which is suggested by it "inside one's head."¹⁰

(B) Definition by substitution: Moore holds that the meaning of an expression is a kind of entity, often called a concept, notion, or proposition, which the expression stands for and which is called up before the mind of anyone who understands the expression. The contrast between knowing the meaning of a concept and knowing the analysis or the meaning of the meaning is as knowing how to use the concept and being able to say how it is used. To analyze a verbal concept is to find another concept or set of concepts which are identical to the original but which are not explicitly employed in concepts used to refer to the concept under analysis.

Kerlinger speaks about constitutive as opposed to operational definitions. In constitutive definitions one concept is substituted for another. Kerlinger quotes Margenau who points out that in order to be scientifically

¹⁰ Hayakawa, quoted by F. Barone, "Semantic Therapy," Classics in Semantics, eds. Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), pp. 335-382.

useful, all constructs must possess constitutive meaning, particularly in scientific theory where constructs are defined with other constructs.¹¹

The strategy of determining the meaning of concepts and statements in terms of equivalents and substitutes involves cognitive processes which in Bloom's Taxonomy of Objectives may be classified under the category of comprehension (2.00), which entails the "ability to restate knowledge in new words."¹² However, Bloom's subcategories of interpretation and extrapolation seem to include skills and abilities that may go beyond a simple restating or substituting with equivalence terms.

(C) Definition through application: The Logical Positivists, sometimes referred to as the Vienna Circle, made a distinction between analytic and synthetic statements. Synthetic or empirical statements can be checked for their meaning and validity; analytic or non-empirical statements are true and meaningful through logical consistency. An analytic judgment is one in which the idea of the predicate is already contained in the subject and therefore adds nothing to it. For example, when the following statement is made: "intelligence is mental acuity," nothing is really explained.

¹¹Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964).

¹²David R. Krathwohl, ibid., p. 272.

In order to sort meaningful from meaningless statements, the Logical Positivists formulated a criterion by which all metaphysical statements were ruled meaningless, i.e., devoid of sense content. They considered analytic statements tautological although they could be preserved. The criterion of meaningfulness they did develop came to be known as the "principle of verification."¹³ According to this principle the meaning of any statement is shown by the way it can or may be verified, that is to say, by applying it to a test situation. To verify a concept or statement in this fashion is to specify the conditions that would enable us to determine the truth or falsity of the statement. However, verification of historical and general propositions is difficult, if not impossible, as the time factor is involved. Consider for instance the concept or natural law of gravity; no finite experiment can ever conclusively show its claim for generality. In order to avoid these types of complications, Ayer¹⁴ proposed a distinction between "strong" and "weak" forms of the verification principle, a notion which comes close to the fallibilistic standpoint that one should always apportion his belief according to the amount of evidence or type of evidence available. To escape the threat of solipsism in the

¹³J. O. Urmson, ed., Western Philosophy and Philosophers (New York: Hawthorn Books, Inc., 1965), pp. 239-244.

¹⁴A. J. Ayer, Language Truth and Logic (London: Gollancz, 1952).

methodology of the verification principle, Carnap and others¹⁵ came forward with the ruling that meaningfulness depends on the question whether or not the proposition is "publicly testable."

It may be of special interest to educators that, by looking at Bloom's Taxonomy, we find again an analogy. The "definition through application" seems obviously related to the cognitive process underlying category (3.00) application. To be able to determine the meaning of a concept or principle is to be able to put it in a test situation, that is, to apply it to a new situation. Or as Krathwohl states very succinctly, knowing the meaning of a concept on this level is "understanding it well enough to apply it."¹⁶

A related well-known strategy of determining the meaning of a concept is the pragmatic method. The term pragmatism was introduced by Peirce. He originally used the term pragmatism as a methodology, a method of ascertaining the meaning of all "intellectual concepts." Peirce argued that if one could discover or define all the practical bearings or effects the object of our conception could have, one would simultaneously know the whole of that concept. Thus, if one wishes to determine the meaning of the word "hard" we should consider the experimental conditions which would be implied by saying of something that it is hard,

¹⁵J. O. Urmson, ibid.

¹⁶Ibid.

such as that it would scratch most things and few would scratch it--which is therefore the meaning of hard.¹⁷

Kaplan states the pragmatist position clearly with

. . . we understand a statement only in so far as we know clearly what we would do, if we believed in it, in any conceivable circumstance. The meaning is nothing other than this plan of action.¹⁸

Says William James, "particular consequences are the only criterion of a concept's meaning, and the only test of its truth."¹⁹

Test every concept by the question "What sensible difference to anybody will its truth make?" and you are in the best possible position for understanding what it means and for discussing its importance.²⁰

Thus, pragmatism does not turn to past experiences but instead looks at the possible outcomes of a statement which determines its meaning. The pragmatist method is prospective.

There is still another approach, the theory of operationalism, that determines meaning through a test situation. Operationalism is characterized by a total empiricist treatment of concepts. For a psychologist the meaning of the concept anxiety is known and fixed when the operations by which anxiety is measured are fixed. Therefore the meaning of a concept involves as much and nothing more

¹⁷Charles S. Peirce, "How to Make Our Ideas Clear" in D. E. Hayden, 1965, ibid., p. 162.

¹⁸Abraham Kaplan, The Conduct of Inquiry (San Francisco, California: Chandler Publishing Co., 1964), p. 43.

¹⁹William James, Some Problems of Philosophy (London: Longmans, Green, and Co., 1911), p. 62.

²⁰William James, ibid., p. 60.

than the set of operations by which the meaning is determined. Or, generally, the meaning of a concept is synonymous with the corresponding set of operations. An operational definition tells us what to do to determine the meaning of the thing defined. Together with the method of verification this theory may be classed as positivistic and scientific.

(D) Definition through analysis: Russell's²¹ chief aim was the development of a logically rigorous and perfect language, that is to say, a language which by invoking certain semantical and syntactical rules would prohibit meaningless conceptual propositions. To arrive at the meaning of a proposition or a concept it is necessary to analyze it into its constituent elements, i.e., complex molecular propositions into elemental atomic propositions. An atomic proposition states an atomic fact, which in its turn refers to the world or rather to things in the world. In this sense then, the meaning of a concept may be determined by breaking it down into meaningful subconcepts which will thus render the original concept meaningful. The cognitive functions of this method of specification of meaning seems to be related to Bloom's concept of analysis (4.00): "understand it [the concept or statement] well enough to break it apart into its parts and make the relations among

²¹Bertrand Russell, An Inquiry into Meaning and Truth (Harmondsworth Middlesex: Penguin Books Ltd., (1940, 1965)).

ideas explicit."²² We note from Krathwohl's definition that analyzing a concept does not consist simply in breaking it down into its constituent elements. The subconcepts are somehow related to each other and these relationships must be explicated.

Although the early Wittgenstein adopted the atomist position and "picture theory of meaning,"²³ he later discarded three premises that were the underpinnings of that position. He rejected the assumption that language was used with the sole purpose of describing and referring to reality; he realized that the rejection of non-verifiable statements as being meaningless does not provide the students and philosophers of language with a suitable solution; and he refuted the view that by peering at a concept or expression for an elongated period of time, one would somehow become clearer about its meaning. In his The Blue and Brown Books²⁴ two essential features may be noted: (1) the usage, and (2) the context in which concepts and statements occur. Wittgenstein conceived of language as an indefinite set of social activities, each serving a different kind of purpose. Each of these distinct ways of using language he called a "language game." Wittgenstein believed that language games are directly

²²David R. Krathwohl, ibid.

²³Ludwig Wittgenstein, Tractatus Logico-Philosophicus (London: Routledge & Kegan Paul (1922, 1961).

²⁴Ludwig Wittgenstein, The Blue and Brown Books (New York: Harper & Row, Publishers, 1965).

learned during childhood rearing through socialization rather than through theoretical discussion. He posited that philosophers should not legislate the use of language but rather examine how people use it, taking care not to divorce the concepts from their social context.

Wittgenstein's modification provides a better analytical tool to determine the meaning of concepts. Special attention must be given to the relationships between concepts and the elements of concepts as they are organized and expressed in usage and context.

(E) Definition through meaning-postulation: The notion of context which emerges in the specification of concept meaning through the technique of analysis receives special significance in the definition through meaning-postulation. In the preceding methods the concept has been treated as a rather isolated entity, a static single unit. However, in agreement with Wittgenstein and Susanne Langer, it is better, perhaps, to speak about the meaning of a concept, not in of its quality but rather in terms of its function.

A function is a pattern viewed with reference to one special term round which it centers; this pattern emerges when we look at the given term in its total relation to the other terms about it.²⁵

In this sense the term "function" implies a more systematic and rigid form of relationship than Wittgenstein's notion of "language games." It specifically asks what the nature

²⁵Susanne K. Langer, ibid., p. 56.

of the relationship is of one concept with the operation of another. Thus, meaning is assigned to the concept by placing it into established or postulated relationships with other concepts.

In a scientific discipline the structural attributes of concepts are most clearly evident. Phenix states,

A discipline is a synthetic structure of concepts. . . . [that is] a conceptual structure whose function is not only to simplify understanding but also to reveal significant patterns and relationships.²⁶

Meaning, then, may be regarded as a structural relation: to ask what a concept means is to ask for the relations or postulated properties referred to by the concept, and for the nature of the larger conceptual framework within which the concept is embedded and within which it functions.

Of course, not just any conceptual structure deserves to be called a disciplined structure. Some bodies of knowledge are organized more rigidly than others into systems of higher degree of abstractedness and with a kind of openness that is more dynamic,²⁷ directed toward multiple engagement into new, not yet discovered or not yet formulated relationships. Phenix²⁸ speaks of bodies of knowledge as situated on a continuum of stronger and weaker disciplines.

²⁶Philip H. Phenix, "The Disciplines as Curriculum Content," Contemporary Thought on Public School Curriculum, eds. Edmund C. Short and George D. Marconnit (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1968), pp. 133-137.

²⁷Abraham Kaplan, ibid., pp. 68-70.

²⁸Philip H. Phenix, ibid.

Some are isolated bits of information and should be considered nondisciplined knowledge; others are highly structured in terms of their complexities of coordinated concepts, and highly meaningful in terms of their applicability and explanatory power.

With reference to Bloom's Taxonomy, some of the cognitive operations involved may be identified as synthesis (5.00): "the putting together of elements and parts so as to form a whole."²⁹ Thus, Bloom's usage of the term synthesis is clearly related to Phenix' conception of the term:

By synthesis is meant the construction of new wholes, the coordination of elements into significant coherent structures. Disciplined thinking is organized thinking. Differences and distinctions are recognized within an ordered framework which permits synoptic vision.³⁰

Thus, it can be seen that a definition of a concept which assumes meaning through postulated relationships involves cognitive processes such as synthesizing: organizing concepts into new and well-integrated wholes. The emerging structure may take the form of a "unique communication,"³¹ a meaningful conceptual framework or Gestalt, or it may assume the more rigid and systematic pattern of disciplined theory--a plan extremely useful for instruction and learning³² and general problem solving activities.

²⁹ Benjamin S. Bloom, ibid., p. 162.

³⁰ Philip H. Phenix, ibid., p. 135.

³¹ Benjamin S. Bloom, ibid., p. 163.

³² Philip H. Phenix, ibid., p. 133.

(F) Specification of meaning through definition of method: The "definition of method" is another means for conceptual clarification and is related to Bloom's notion of evaluation (6.00). This distinction refers to the rule that "the meaning of a term be fixed by laying down a set of necessary and sufficient conditions for its application."³³ To say it differently, the meaningful applicability of any concept is dependent on a set of rules of usage. Systematic examination of the operation and the adequacy of these rules of usage, then, becomes another instrument for conceptual clarification. We may distinguish two modes of evaluating or judging the usage of a concept: (1) by an assessment of the logical rigor, i.e., the high degree of internal consistency by which a concept is applied, and (2) by external judgment as to the adequacy of the implicit and explicit assumptions underlying the concept and its frame of reference.

The method of internal consistency follows two steps: First, it determines the definition of meaning a concept carries (i.e., the rules of usage) within the conceptual frame in which it is supposed to operate. Secondly, it follows the concept through in the network of applications and examines carefully whether it has been employed consistently, i.e., whether ambiguity, change of meaning and faulty application has been avoided.

³³ Abraham Kaplan, ibid., p. 68.

The method of external consistency involves a cogent and constructive assessment of the rules of usage themselves under the light of any or all of the above outlined techniques. It may lead to a modification or a total refutation of the rules in operation by substituting them with a different set of rules that is based on more sophisticated considerations. To put it in more simple terms, if we do not believe that a concept has been adequately defined, we should attempt to articulate the shortcoming and offer some alternative definition of meaning.

Summary of Specifications of Meaning

(A) Ostensive or referential definition: What concrete thing, object, event does the concept or expression refer to?--most suitable for empirical, concrete or observational terms.

(B) Definition by substitution: What other verbal term or expression can we find that stands for, or means the same as the concept under examination?--most suitable for notational terms, sufficiently "definite" constructs, and foreign and learned or professional terms.

(C) Definition through application: Under what conditions can we demonstrate the meaning of this concept? Or, how does somebody who knows and believes in the concept use it or apply it?--useful for most empirical, abstract and theoretical terms.

(D) Definition through analysis: What related

sub-concepts can we distinguish? Or, how may the concept be broken down into its meaningful constituent parts?--especially suitable for complex concepts and more general theoretical terms.

(E) Meaning-postulation definition: How does the concept fit into a larger conceptual structure? Or, more rigidly: what postulated relationships does the concept express in the theoretical system?--most applicable to concepts derived from the disciplined sciences.

(F) a. Internal evaluation: What are the rules of usage (i.e., meaningful properties, relations and functions) of this concept and are they consistently applied?

b. External evaluation: What constitutes a cogent critique of the rules of usage of the concept under examination?

Concepts: their Dynamic Nature and their Openness of Meaning

In the preceding paragraphs the various ways in which the meaning of a concept can be specified were examined. The kind of meaning one arrives at seems to be related to the method of analysis one happens to employ. It also appears that some concepts may be more productively approached with one technique rather than with another. Much misunderstanding can arise if one is not aware of this. For example, how meaningful is a sight-seeing tour around the buildings of Parliament (ostensive), if one wishes to explain to a student what the institutional concept

"government" means (analysis and meaning-postulation)?

We may apply Ryle's³⁴ notion of "category mistake" to those cases where an inappropriate use is made of a particular method of analysis for conceptual clarification.

In addition to these complications, each theory of meaning seems to have its own difficulties. Two people employing the same method of analysis may still arrive at different outcomes. Although openness and dynamism of concept meaning is the "life-beat" of language, there is a certain openness about concepts that may give rise to misunderstandings. In daily life conceptual misunderstandings may either bring comic relief or annoyance; in disciplined knowledge, however, ambiguities of meaning are to be avoided. Kaplan distinguishes four types of openness of meaning which have special relevance for the scientific functions of concepts in the social sciences.³⁵ They are as follows.

(1) Systematic openness, which is a reflection of the fact that the set of propositions and hypothesized relationships making up a theory is never complete. As more meaningful relationships are spelled out within the framework of a theory, we increase our understanding and knowledge of things.

³⁴Gilbert Ryle, The Concept of Mind (New York: Barnes & Noble, Inc., (1949, 1969).

³⁵Abraham Kaplan, ibid., pp. 62-73.

(2) Conceptual vagueness. Concepts are actually generalizations from conceptions which are held by individual persons. And since the possibility of two persons having perfectly identical conceptions is very unlikely, the number of discriminations one can make about a concept is theoretically at least infinite. Says Kaplan: "I have never known an empirical term, even from the most exact sciences, in which I could not, when pressed, bring to light a shadow of vagueness."³⁶ Kaplan speaks about the ever-present possibility of the occurrence of borderline cases, i.e., the difficulty of deciding whether or not something belongs to the designated class (external vagueness). And Kaplan talks about the problem of judging whether all the necessary and sufficient conditions for application of the concept are present, i.e., the question whether they are central or marginal cases (internal vagueness).

(3) Dynamic openness. Kaplan defines dynamic openness as "the leading edge of scientific terms, their permanent possibility of change in meaning."³⁷ Any concept may undergo slight alterations in their denotational aspects or they may give way to radically new concepts.

(4) Premature closure. The demand for exact formulation and delimitation of concept meaning has the inherent danger

³⁶Ibid., p. 66

³⁷Ibid., p. 69.

of premature closure. This tendency is especially manifest in the formation of rigid belief systems of the closed-minded or dogmatic person. A person has to be able to live with the idea that concepts are essentially dynamic and display openness of meaning. This is true for every day language as well as for scientific terminology. Says Kaplan: "Tolerance of ambiguity is as important for creativity in science as it is anywhere else."³⁸

Implications for the Social Studies Curriculum

The question that shall guide us through the remainder of this chapter is: What is the didactical significance of the theories of meaning for the social studies curriculum? And implicitly, what are some of the difficulties to be found in the various methods of analyses?

There is an obvious advantage in clarifying the meaning of concepts through the device of ostensive or referential definitions. By providing concrete positive and negative instances a concept comes gradually sharper in focus. Of course, empirical observational terms are most suitable for this method of analysis. Anthropological artifacts and geographical items can be demonstrated by actual presentation or through photographs and pictures. Theoretical terms such as "culture" or "genotype" cannot be adequately handled through ostensive definitions.

³⁸Ibid., p. 71.

A potential pitfall of the referential theory of meaning is situated in the fact that words are not what they ostensibly refer to. To say it differently the word is not the thing. It is especially a tendency among children that the things and their names are regarded the same.³⁹

Conceptual clarification through substitution with a set of synonymous terms is especially useful if the defining term is better known than the term defined. Thus, the anthropological term pollex may be translated into "the first digit of the manus" or just "the thumb."

Aristotle made the first rules about "definitions." According to Aristotle a definition does two things. It places the object defined in a class (genus) and tells how the object is to be distinguished from other members of its class (differentia). The trouble with Aristotelian definitions, however, is that anything can be formally defined whether it exists or not and whether it is meaningful or not. Furthermore, the class and the distinguishing characteristics, in terms of which Aristotelian definitions are made, may be no clearer than the thing defined. Thus, an Aristotelian definition may suffer from lack of clarity of meaning,⁴⁰ and is prone to be reduced to a meaningless tautological equation. An Aristotelian definition seems most suitable for specifying

³⁹ Neil Postman, ibid., p. 137.

⁴⁰ Anatol Rapoport, "What is Semantics?" Classics in Semantics, Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), pp. 337-354.

the meaning of a notation which is essentially an abbreviation, or for translating a foreign or learned term. Constructs may also be adequately specified through a definition of terms provided that the construct is sufficiently "definite."⁴¹ However, theoretical terms such as "gene-pool," or "culture" are not easily replaced by another term or set of terms. In their book Culture, Kroeber and Kluckhohn⁴² reviewed some 150 definitions of culture which they then attempted to classify. An examination of the wide variety of definitional interpretations of the term may illustrate some of the problems involved.

Effecting concept formation through the device of verbal definitions is probably still one of the prime methods of instruction in schools.⁴³ This method carries, however, the inherent danger of establishing verbalisms and of rote verbal learning, that is, of teaching the students to verbally "parrot" definitions or "meanings" of concepts without understanding or comprehending the real meaning of the concepts. Thus, William James recounts how some students when asked whether it would get warmer or colder as one dug a hole deeper and deeper into the earth could not reply, but prompted by their teacher they parroted the sentence, "The

⁴¹Abraham Kaplan, ibid., p. 72.

⁴²A. L. Kroeber and Clyde Kluckhohn, Culture (New York: Vintage Books, 1952).

⁴³John B. Carroll, Language and Thought (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 82.

interior of the globe is in a condition of igneous fusion."⁴⁴

An interesting kind of abuse of this mode of definition of meaning is represented by the term "professional jargon." We may describe this term by the tendency among some scientists to assign a scientific name to a methodological principle that actually needs analysis and explanation. Said Goethe, "The words of science hide its substance." And Phenix remarked

When a real discipline in certain directions begins to spawn concepts and theories which on balance are a burden and hindrance to insight, in those areas it degenerates into undisciplined thinking.⁴⁵

Determining or demonstrating the meaning of a concept by putting it to use in a test or problem situation is a didactically relevant method since it requires learning situations marked by student involvement in activities.

Clarification of educational objectives such as "dignity of man" or "democratic government" becomes probably more effective if one could state what one would do, and not do, if one believed in the term, rather than giving some sort of vague description or definition of the term.

Operationalism is a method of analysis that is most suitable, it seems, for scientific terms. Pragmatism seems to be able to handle any type of concept for clarification of meaning. And Logical Positivism is most useful for the various empirical statements.

⁴⁴Ibid., p. 83.

⁴⁵Philip H. Phenix, ibid., p. 135.

Almost any concept, it seems, could be broken down into a set of related or subconcepts, although Gestalt theory has pointed out how some essential property may get lost if the "meaningful whole" is taken apart in components. Thus, the concept "culture" is often divided into a number of categories which are all somehow related to each other: "technology, economic, social organization, ideology, and communication." Another definition of culture, however, may come to have a different set of terms.

General educational objectives especially are frequently characterized by a certain vagueness which is often a result of their generality. This is why Hilda Taba⁴⁶ says that these general objectives need to be translated into more specific ones. What happens then, is that we clarify our general objective--usually expressed in concepts or conceptual propositions such as: "education for survival"--by breaking it down into more specific ones by asking what we mean by our general objective. Often certain ambiguities come automatically to the fore: i.e., What survival? Organismic survival? Survival of individuals? Survival of social groups? Cultural survival? And if so, which culture? And in what form?

If the meaning of a concept is "stretched too far," we can speak of "wooly definitions." The concept becomes so general that almost any meaning can be assigned to it.

⁴⁶Hilda Taba, "Translating General Objectives into Specific Ones," Contemporary Thought on Public School Curriculum, eds. Edmund C. Short and George Marconnit (Dubuque, Iowa: Wm. C. Brown Co., Publishers, 1968), p. 134.

Instances of this may be found in phrases such as "education for democracy," "dignity of man," or "education for survival." At other times we confuse clarity with too high a degree of specificity. Ralph Tyler provides an example of a teacher who defined the general objective "the ability to read French" into specific objectives, simply by breaking this objective down into too great a number of specific objectives.⁴⁷ It appears then, that an educational objective may suffer from lack of clarity and meaningfulness by being too general. However, too high a degree of specificity may become meaningless as well.

Every concept acquires its meaning, and in fact, has meaning only within a whole conceptual order, framework, or system, in which it "belongs." Thus, by employing a certain concept one has to know the implications, i.e., the very epistemological principles and assumptions that underlie the conceptual system or theory which engenders and sustains the concept. Especially in social science theory, it is important to realize that concepts are never "innocent" or "neutral" and by employing a particular concept one unwittingly may be persuaded to accept its implications.

A meaning-postulating definition then, attempts to clarify a concept by situating it in the entire conceptual system in which it functions. It involves an analysis of

⁴⁷Ralph W. Tyler, "Some Persistent Questions on the Defining of Objectives," in Short and Marconnit, ibid., pp. 279-283.

the concept, as well as an analysis of the assumptions underlying the system in which it is embedded. So in anthropological theory, for example, we may define the term, "mode of production," by its postulated meaning of being the existential basis for other social, political and intellectual processes of life. However, we cannot really understand the concept "mode of production" in this way unless we become familiar with the general theory which engenders the concept. Similarly, we can follow Kaplan who says:

We learn what is meant by "culture" in a certain theory as we see what the theory says about culture, what inferences it draws from these assertions, what evidence it adduces on their behalf. We are provided not with a dictionary of the terms, but with a guide-book to the subject-matter.⁴⁸

A meaning-postulating definition therefore involves a synthesizing activity, a tentative placing of the concept in a theoretical framework and a testing of its postulated relationships. This is especially true of course for those concepts which have a function in disciplined scientific theory.

Suppose one of our objectives is for the student to understand and to be able to apply the concept of ESP. Since the concept "extra-sensory perception" has no reference to a disciplined theoretical system, we may find it impossible to specify the meaning of the term, and therefore to teach it. ESP is a notion that seems to stand--as a name or

⁴⁸ Abraham Kaplan, ibid., p. 73.

label--for otherwise unexplainable mental or psychic processes. It has no meaningful relationships with concepts from established psychological theories. All we could possibly do in order to somewhat clarify the concept of ESP is to ask the ostensive question: What concrete (i.e., observable) behavioral phenomena does the term ostensively refer to?

Charles Peirce pointed out that a definition of error consists in treating different things as though they were similar or the same things as though they were different.⁴⁹ Translated into operations with concepts, error occurs if two related concepts are dealt with as if they were unrelated, or if two unrelated concepts are treated as if they were related in terms of their respective places in the same theory or conceptual system.

The last mentioned method of specification of meaning through checking for internal and external consistency has obvious didactical value. We may ask, has the concept been used consistently? If the concept has been borrowed from another discipline, can we apply it to this problem without changing its original meaning or function? These and other questions must be answered adequately.

To conclude, in this chapter we focussed on the meaning of concepts, on a variety in method and openness

⁴⁹Charles Peirce, quoted by Donald Schon, Displacement of Concepts (London: Tavistock Publications, 1963).

in the interpretation and clarification of concept-meaning, and on an emphasis on logical consistency in manipulating concepts in the construction of social studies curriculum objectives.

However, conflict in interpretation of concept-meaning is due to many contingencies which take us beyond the boundaries set for the present discussion. This chapter has been preoccupied mainly with the "denotative" meanings of concepts. Connotative dimensions of meanings are of a more idiosyncratic nature and differ more widely with different individuals. However, the connotative meanings tend to "colour" and influence the denotative meanings. Especially where the connotations are charged with affective or emotive content. Mainly for these reasons it seems that Neil Postman criticized the quest for the "real" meaning of a word or statement, where people differ in their interpretation of some verbal concept or statement, and where unique individual experience tends to give an idiosyncratic denotative and connotative flavor to most concepts. Asking for the "real" meaning, according to Postman,⁵⁰ is a rather problematic affair. What one should ask also is

⁵⁰Neil Postman, ibid., p. 185.

therefore: "What will these people make it mean? And for what reasons? And in what circumstances?"

We conclude with a statement by S. Ullmann:

Any definition of meaning should be regarded as no more than a working hypothesis. Its value will depend on how it works: On the help it can give in the description, interpretation and classification of semantic phenomena.⁵¹

⁵¹S. Ullmann, quoted by Marjorie B. Creelman, The Experimental Investigation of Meaning (New York: Springer Publishing Co., 1966), p. 27.

CHAPTER V

THE FUNCTIONAL ROLES OF CONCEPTS

One could argue that the teaching of any concept within the realm of social studies is useless unless the concept appears in functional relation to other concepts. In fact, a concept is never an isolated entity but is always functional in a context of meanings larger than itself. That is, every concept has a sense of belonging, and carries an idea of relatedness to some frame of reference, conceptual system or theory. Studying social studies concepts then, involves an analysis of how each concept is structurally situated and how it is being used within the conceptual framework of the social science theory within which it functions. Irving M. Zeitlin states:

"System," "context," "complementariness," "correlatedness," etc., are already implied in every concept. There is no such thing as an isolated concept, which can be demonstrated by the fact that one has a "sense" of where a given concept properly belongs. . . . Even the process of thinking is a matter of placing a concept in its proper total framework; a thing is taken to be explained, comprehended, insofar as we have discovered its place in the currently accepted orders, series, levels.¹

In the social studies curriculum educational objectives are often formulated in terms of "main ideas," "key

¹Irving M. Zeitlin, Ideology and the Development of Sociological Theory (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), p. 285.

concepts," and "related concepts" of some body of knowledge organized for instruction. And various social scientists have developed lists or charts of the "fundamental ideas," or "key concepts" of their particular discipline. This chapter examines therefore, how meaningful it is to speak for example of the key concepts of the discipline of economics, or the key concepts of the discipline of anthropology, and so on. Also discussed is the relevance of an emphasis of "process" over "content," or "the rules of inquiry" over "the conceptual structure" of a disciplined body of knowledge. Other curriculum workers have attempted to come to a synthesis of "major concepts for the social studies,"² rooted in the collective of the various disciplines. This idea of "unification of the sciences" through the identification of central ideas, shared by the various disciplines is also commented upon.

Simply stated, the function of a concept could be formulated as follows: a concept is what it does or what it is being used for. And the usage of the concept may in turn be found in the structural make-up of the term. The process of conceptualization is essentially a process of categorization and classification. Even a discipline is "essentially nothing more than an extension of ordinary

²Roy A. Price, Gerard R. Smith and Warren L. Hickman, Major Concepts for the Social Studies (Syracuse, New York: Social Studies Curriculum Center, 1965).

conceptualization."³ What is examined then, is how concepts are related to the various classificatory schemes that underly their usage and their structural make-up.

Classifications of Concepts

We may distinguish two systems of classifying concepts (1) the categorical, and (2) the hierarchical taxonomies.

ad. (1) The categorical taxonomy stems from Aristotle. He distinguished such now familiar categories of concepts as substance, accident, relation, quantity, quality and so on. For example, the terms "large" and "small" may be classified as relational concepts since they assume standards of comparison for size, and are no absolute designational like quantities. We still use Aristotle's method to distinguish between quantitative and qualitative concepts, between substantive and attribute concepts.

Another example of categorical taxonomy related to Aristotle's is the distinction of science concepts into (a) classificatory concepts, (b) comparative concepts, and (c) quantitative concepts. Classificatory concepts are found most often in prescientific, everyday experience. They constitute the simplest types. By means of them a definite class of objects is divided into two or more

³ Philip H. Phenix, "The Disciplines as Curriculum Content," Contemporary Thought on Public School Curriculum, eds. Edmund C. Short and George D. Marconnit (Dubuque, Iowa: Wm. C. Brown Co. Publishers, 1968), p. 134.

mutually exclusive species. Says Joseph J. Schwab, "The logical class, consisting of members alike in some defining respect, permits us to infer with confidence knowledge about members of the class from knowledge of the class."⁴ Examples are: the classification of plants and animals, the division among chemical substances, and the systematic division of different forms of governments and economic systems. Schwab describes the rise of this "commonest form of knowledge":

. . . we see, first, that certain wholes are identified, bounded, and described. Then, various parts of the described whole are discriminated and "explained" in terms of the contribution they make to the bounded whole.⁵

Comparative concepts are also called concepts of order or topological concepts. They present a more complicated case; they include Aristotle's relational concepts. When, for example, a language contains only four terms for heat (hot, warm, lukewarm and cold) to designate thermal states, then it cannot express any comparison. One may call this a refinement of linguistic usage which not all cultures possess, or not to the same degree.

Quantitative or metrical concepts are the most precise conceptual instruments that a scientist has at

⁴Joseph J. Schwab, "The Concept of the Structure of a Discipline," The Educational Record (Vol. 43, July, 1962), p. 203.

⁵Joseph J. Schwab, "The Structure of the Natural Sciences," The Structure of Knowledge and the Curriculum, eds. G. W. Ford and Lawrence Pugno (Chicago: Rand McNally & Company, 1965), p. 48.

his disposal. Thus, in dealing with heat, the scientist is able to talk in terms of calories, thermometer scales, and so on. One might argue that this taxonomy is really hierarchical. The criterion would be some notion of refinement and complexity.

ad. (2) The hierarchical taxonomy may be said to have vertical as well as horizontal structure. The idea of the hierarchical taxonomy of concepts may be found in the early work by Frohn, Sassenfeld and others of the Kölner Schule,⁶ (the school of Cologne). They set up a "Theorie der Bewusstseins-schichtung" (theory of levels of thinking) with the following categories: (1) individual, observational or concrete, (2) schematical, and (3) abstract or categorical perceptions and thinking. This type of taxonomy rests on the idea that some concepts are of a higher order than others. The idea of a concept ascending and encompassing others tends to illuminate and bring order to an otherwise incoherent field of fragmentary knowledge. Bruner made a similar distinction between "conceptual" or "abstract" categorization and "perceptual" or more immediate concrete categorization.⁷

⁶B. G. Palland en J. Jonges, voorheen Bigot, Kohnstamm en Palland, Beknopt Leerboek der Psychologie (Groningen: J. B. Wolters, 1961), p. 282.

⁷Jerome S. Bruner, Jacqueline J. Goodnow and George A. Austin, A Study of Thinking (New York: John Wiley & Sons, Inc., 1956).

Kaplan's "empirical-theoretical continuum"⁸ is reminiscent of the preceding model. Below is Kaplan's classification of terms as it functions in the "scientific enterprise."

(1) Observational terms. Observational terms are those whose application rests on relatively simple and direct observations. They are also called concreta, empirical terms, or phenotypes.

(2) Indirect observationals. Indirect observationals are of a hypothetical nature but not as artificially designed as constructs. Kaplan illustrates this category with the concept "dreams," which are never perceived consciously, in a direct way. We infer the existence of dreams, or to say it differently, we form the concept of dreams by inferring their real existence from remembered dream contents. In some cases such terms take the role of so-called "presuppositions" or "assumptions" since their "existence" has already been "demonstrated" in previous theories.⁹ For example, the concept "subconscious" is now treated as an assumed or well established phenomenon. The indirect observational concept "gene" was arrived at in a similar way.

⁸Abraham Kaplan, The Conduct of Inquiry (San Francisco, California: Chandler Publishing Co., 1964), pp. 54-62.

⁹Kaplan, ibid., pp. 86-87.

(3) Constructs. Kerlinger defines constructs as concepts "having been deliberately and consciously invented or adopted for a special scientific purpose."¹⁰ In one respect, constructs are of a notational nature, performing similar functions as abbreviations; on the other hand, they often acquire enough conceptual content to be considered substantive in meaning. Constructs play an essential role in the proposition of hypotheses. They may be constitutively or operationally defined. That is to say, constructs may be defined with other concepts or in terms of expected measurable outcomes.

(4) Theoretical terms. Theoretical terms represent the highest stage in Kaplan's taxonomy. Theoretical constructs are highly explanatory. These concepts may be seen as "bridges," relating lower order constructs and concepts together into a more or less complete explanatory framework often called scientific theory. To say it differently, theory consists of postulated relationships among concepts.

Concluding from the above it appears that concepts can be classified according to the development of a number of categories. Kaplan's model is probably most useful since it enables the student to examine a concept in terms of its function in social science theory. Especially with the purpose of detecting and avoiding functional ambiguity of

¹⁰Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 32.

concepts, it might be helpful if one could detect what the concept encountered is doing and what it is supposed to do. A paradigm then could be synthesized that would list some of the dimensions a concept might possess. The following tentative items may serve as such a paradigm:

- (a) descriptive: names, labels.
- (b) substantive/analytical: compares on basis of common elements, generalizes, defines content.
- (c) relational: relates, structures, based on modes of relationships.
- (d) classificatory: classifies, ranks, orders, categorizes.
- (e) explanatory: explains, refers to general laws, universals.
- (f) theoretical/inferential-categorical: subsumes into theory, theorizes.

For example, the term "culture" represents a concept that may have a number of dimensions as its function. It may function as a simple substantive or analytical term when it refers to the index of cultural artifacts and institutionalized modes of life of a people. In another instance, "culture" may be used as a classificatory term, when it is counterposed with concepts such as state, society, nation, and so on. Or "culture" may be used as a theoretical term as in the concept "a culture of poverty" which the anthropologist Oscar Lewis developed. We must speak of functional ambiguity, however, when the theoretical term

"culture" is being misused as an explanatory term while in fact it does not possess explanatory power. This happens, for instance, when a sociologist claims that it is "the culture of poverty" that prevents the poor from improving his social state.

Disciplined and Nondisciplined Knowledge

The advantage of disciplined thinking is essentially that one is able to trace and understand the concept in its relation to a scientific theory, i.e., a structured body of knowledge--whether it possesses, in Phenix' terms, a "weak" or "strong" degree of discipline. Phenix believes that the difference between disciplined and nondisciplined thought is the difference between "knowledge" and "mere opinion." Everyone has opinions about all kinds of topics, but knowledge is the outcome of disciplined inquiry.¹¹ The term discipline itself is an ambiguous term. Traditionally we speak about the discipline of psychology, the discipline of physics, the discipline of economics, and so on. James E. McClellan has pointed at the somewhat arbitrary nature of the application of the term,¹² and King and Brownell found these isomorphic features of the concept discipline:

A discipline is a community of persons.

¹¹Philip H. Phenix, Realms of Meaning (Toronto: McGraw-Hill Book Co., 1964),

¹²See James E. McClellan and others in The Discipline of Education, eds. John Walton and James L. Kuethe (Madison: The University of Wisconsin Press, 1963).

A discipline is an expression of human imagination.
 A discipline is a domain.
 A discipline is a tradition.
 A discipline is a syntactical structure--a mode of inquiry.
 A discipline is a conceptual structure--a substance.
 A discipline is a specialized language or other system of symbols.
 A discipline is a heritage of literature and artifacts and a network of communication.
 A discipline is a valuative and affective stance.
 A discipline is a instructive community.¹³

Our interest here is with the notion of discipline as an instructive community. According to Phenix, "only knowledge contained in the disciplines is appropriate to the curriculum," since one of the essential characteristics of a discipline is, that it is "knowledge organized for instruction."¹⁴ There are also considerations of efficiency for the teaching of disciplined knowledge rather than nondisciplined knowledge. Says Phenix, "if learning time is to be economized, all material should come from the disciplines, and none from other sources."¹⁵ Phenix distinguishes three fundamental features of disciplined understanding, "all of which contribute to the availability of knowledge for instruction and thus provide measures for degree and quality of discipline."¹⁶

¹³ Arthur R. King and John A. Brownell, The Curriculum and the Disciplines of Knowledge (New York: Wiley, 1966), p. 95.

¹⁴ Philip H. Phenix, (1968), ibid., p. 133.

¹⁵ Philip H. Phenix, (1964), ibid., p. 314.

¹⁶ Philip H. Phenix, (1968), ibid., p. 134.

(1) Analytic simplification:

All intelligibility rests on a radical reduction in the multiplicity of impressions which impinge upon the senses and the imagination. . . . learning consists in the growing ability to sort and select, that is, to simplify. . . . It is commonly assumed that abstract thinking is difficult and complicated. This assumption betrays a misunderstanding of what abstraction is. Analytic abstraction is a way of thinking which aims at ease of comprehension and reduction of complexity. For this reason all learning--all growth in understanding--takes place through the use of simplifying concepts. . . . Thus, contrary to the popular assumption, knowledge does not become more and more complicated as one goes deeper into a discipline. . . . The further one goes in it the more pervasive are the simplicities which analysis reveals.¹⁷

(2) Synthetic Coordination:

A discipline is a conceptual structure, whose function is not only to simplify understanding but also to reveal significant patterns and relationships. . . . By synthesis is meant the construction of new wholes, the coordination of elements into significant coherent structures. Disciplined thinking is organized thinking. . . . abstractions are . . . synthesized into more and more comprehensive patterns of coordination.¹⁸

(3) Dynamism:

By this is meant the power of leading on to further understandings. A discipline is a living body of knowledge, containing within itself a principle of growth. Its concepts do not merely simplify and coordinate; they also invite further analysis and synthesis. A discipline contains a lure to discovery. Its ideas suggest new constructs which provide larger generalizations and reconstituted modes of coordination. . . . Disciplined ideas not only constitute families of concepts, but these families beget progeny. They have generative power.¹⁹

¹⁷ Ibid.

¹⁸ Ibid., p. 135.

¹⁹ Ibid.

The teaching of disciplined rather than nondisciplined knowledge does not limit the instruction of any knowledge that could be considered as proper curriculum material for the social studies classroom. Each discipline, says Israel Scheffler, strives to offer a complete, systematic account of some realm of things in the world.²⁰ In the social studies curriculum, the teaching of disciplined knowledge should have priority over nondisciplined knowledge because disciplined thinking is more structured, generalizing, methodological, logically consistent, comprehensive, simplifying, problem oriented, predictive and explanatory.

Conceptual Structure and Syntactical Structure

Learning the structure of a discipline, says Bruner, is learning how things are related.²¹ The concept of structure, however, has a "process" and a "content" aspect, and this dichotomous distinction is itself subject to controversy. The older argument seems to be for the teaching of the "conceptual structure," i.e., the patterns of main ideas and related or subconcepts of a disciplined body of knowledge while the more recent emphasis is on the "process" part. So, we read in Process as Content by Parker and Rubin:

²⁰ Israel Scheffler, ed. Philosophy and Education (Boston: Allyn and Bacon, Inc., 1966), p. 66.

²¹ Jerome S. Bruner, The Process of Education (Cambridge, Massachusetts: Harvard University Press, 1960).

The substance of our proposition is that process--the cluster of diverse procedures which surround the acquisition and utilization of knowledge--is, in fact, the highest form of content and the most appropriate base for curriculum change.²²

However, the polarization between process versus content oriented curriculum is itself an ambiguous distinction. Some authors²³ take the concept "process" to mean general cognitive and affective skills; while others²⁴ link this term more closely to the various modes of inquiry characteristic of disciplines.

Schwab makes a sharp distinction between two different components of the structure of a discipline: the "body of concepts" functioning as "a guide to inquiry," and the "syntactical structure" of a discipline, i.e., "the pattern of its procedure, its method, how it goes about using its conceptions to attain its goals."²⁵ The result of this distinction between the conceptual structure and the syntactical structure is, that on the one hand, the social studies curriculum stresses teaching the structurally oriented concepts of a discipline rather than a confusing quantity of irrelevant information. As Schwab pointed out,

²²J. Cecil Parker and Louis J. Rubin, Process as Content (Chicago: Rand McNally, 1970), p. 1.

²³See Parker and Rubin, ibid.; Louise M. Berman, New Priorities in the Curriculum (Columbus, Ohio: Charles E. Merrill Publishing Co., 1968).

²⁴Joseph J. Schwab, (1962), ibid.; (1965), ibid.; and Philip H. Phenix, (1964), ibid.; (1968), ibid.

²⁵Joseph J. Schwab, (1962), ibid., p. 201.

. . . older knowledge tended toward the shape of a catalogue. . . . Modern scientific inquiry tends to look for patterns--patterns of change and patterns of relations--as their explanatory principles. When such patterns are found, they throw a new and more complex light on the items of our old catalogues.²⁶

On the other hand, there is the demand for teaching the "methodology" of a discipline, which would then be translated didactically into self-directed learning, into the discovery method, and into the inquiry learning method.

How meaningful is the distinction between the notions of the conceptual structure as opposed to the syntactical structure of a discipline? The thesis of this chapter is that an examination of the structural-functional role of concepts in a theoretical system reveals that the dichotomization of the structure of a discipline into its substantive and syntactical parts is wholly artificial. The fact is that one cannot be taught without the other. Only if the concept has deliberately been lifted out of its systemic context can we contrast it with the syntactical rules of the system in which it is conceived. The point is, that the meaning of the systemic concept is "carved" by the methodology or mode of inquiry of that theoretical system. As Kant said, "concept formation and theory formation go hand in hand."²⁷ How the syntax of the theory affects the systemic meaning of a concept may be illustrated with the

²⁶Ibid.

²⁷Abraham Kaplan, ibid., p. 52.

notion of "social class." In W. Lloyd Warner's well known sociological conception of the term, the approach for specification of meaning is essentially empirical. That is, the six social categories that compose the concept social class are "ostensively defined." They can actually be "seen" in terms of differences in housing, levels of consumption, memberships of exclusive and nonexclusive organizations, and so on. The methodology or procedures involved in establishing the sociological concept are statistical and descriptive. In contrast, the economic conception of social class in the theory of Marx cannot be "seen," although this does not make the concept less real. In the theory of Marx the term "social class" is a hypothesized theoretical term fostered by more abstract concepts of social dynamics. His method of inquiry is essentially different from Warner's; it involves processes of speculation and postulation through the characteristic device of dialectical inquiry.

These examples seem to suggest that a proper understanding of a systemic concept cannot be effected unless one takes the mode of inquiry which is characteristic for the theory into consideration. The conceptual structure of a discipline is inextricably intertwined with the syntactical structure. The two aspects can be distinguished only artificially. Social studies curriculum concepts derived from disciplined knowledge are not fully comprehensible or meaningful by themselves. They are meaningful only in their conceptual and syntactical pattern of relations.

In order to determine the full meaning of a concept, it must be studied within the confines of the theoretical system within which it is embedded.

Concepts, Disciplines and Theories

How meaningful is the notion of "the structure of the disciplines" as an objective for the teaching of social studies? For the substantive aspect of the structure of disciplines Schwab notes that "the substantive structures used in psychology belong to psychology and differ radically from those appropriate to biology, physics, or chemistry."²⁸ And he continues, "it is impossible to describe the substantive structures of the sciences in general, [because these] structures are not only extremely numerous but extremely varied."²⁹ The various disciplines differ not only in terms of their substantive structure, but also in terms of "the characteristic method" of investigation. For example, it is obvious that the historian's method of inquiry is quite different from that of the psychologist. It seems then, that we can speak of neither the substantive structure of the disciplines nor the syntactical structure.

Furthermore, each particular discipline tends to be characterized, not by one but by a variety of conceptual structures. We could indeed speak of a "plurality of

²⁸ Joseph J. Schwab, (1965), ibid., p. 46.

²⁹ Ibid.

structures." Says Schwab,

Such a pluralism of substantive structures and of bodies of knowledge is characteristic of the social sciences generally and of many humane studies. There is more than one body of economic knowledge; different anthropologists and different sociologists tackle their problems in different terms and in different ways.³⁰

And similarly, each discipline usually does not have just one, but a variety of syntactical procedures in which scientists pursue their interests. Discussion of the concept of "social class" on page 106 illustrates this point. King and Brownell hinted at the ambiguity of speaking about the syntax of a discipline:

As useful as the term syntax is, its range of applicability to the full range of disciplines is not clear. Since the term syntax refers to the underlying form or arrangement of elements, it suits most clearly those disciplines where a clear methodology or group of related methodologies has been posited, such as mathematics or physics. Inquiry in biology is conducted according to several related but different modes of inquiry, each found appropriate to differing investigative tasks of the scholars. Historians appear to have a group of rather well worked out and agreed on operational postulates for the direction of historical discovery, although there is a great controversy over the philosophical "explanation" of these practices. The social sciences such as sociology and psychology appear to have only immature syntactical structures, with those of psychology being more highly developed for inquiry into the behavior of the lower animals than for inquiry into human behavior.³¹

It appears then, that it is not possible to speak of the substantive nor of the syntactical structure of a

³⁰ Joseph J. Schwab, "Structure of the Disciplines: Meanings and Significances," The Structure of Knowledge and the Curriculum, eds. G. W. Ford and Lawrence Pugno (Chicago: Rand McNally & Company, 1965), p. 29.

³¹ King and Brownell, ibid., p. 80.

particular discipline. The conceptual structures and modes of inquiry within one discipline may be diverse and even conflicting at the same time--such as when two or more different theories claim to render a truthful account or "explain" the same phenomena. Thus, if we compare the various conceptual systems within economics or psychology for example, we may find the modes of inquiry and conceptual structures as diverse as between these disciplines. Within the discipline of psychology, we find tendencies as dissimilar as phenomenology and the operant theories, both of which employ radically different concepts and essentially different inquiry rules as well.

James E. McClellan³² points out that the proposition "X is a discipline" is rather arbitrarily employed. Traditionally the various disciplines are identified by the names of the different departments they represent in the institutions of higher learning. The term "discipline" is therefore not to be equated with "theory" or "theoretical system." Although we may speak about the discipline of physics or psychology, we do not speak about the theory of physics or the theory of psychology. We can thus follow McClellan when he states:

To a degree, the line between disciplines is not precisely the line between theories; the former has an element of uneliminable historical arbitrariness,

³²James E. McClellan, in The Discipline of Education, eds. John Walton and James L. Kuethe (Madison: The University of Wisconsin Press, 1963), pp. 61-71.

while the latter appears only after logical analysis shows how and where to draw it.³³

The notions of "inquiry," "method," "process," or "structure," cannot be separated from the "substantive," "relational," or "content" aspects of concepts. Every single concept artificially isolated from the scientific theory in which it is embedded, has the notions of inquiry, method, process or structure built into it. When one fails to place the concept into its meaningful systemic framework, then it seems to have lost its dimensions of meaning, structure, method, or mode of inquiry. The isolated concept of "social class," as we saw, has become a confused and ambiguous term, without the strength of the scientific implications it receives in any of the particular social theories of Marx, Weber, Warner, Parsons, and so on.

Rather than attempt to identify the main ideas of the discipline of economics,³⁴ the key concepts of the discipline of political science,³⁵ the fundamental ideas of the discipline of sociology,³⁶ or the central concepts of the discipline of anthropology,³⁷ we must attempt to

³³James E. McClellan, (1963), ibid., p. 64.

³⁴See Lawrence Senesh, in Concepts and Structure in the New Social Science Curricula, ed. Irving Morrissett (New York: Rinehart and Winston, Inc., 1967), pp. 24-28.

³⁵See David Easton, in Morrissett, ibid., pp. 28-30.

³⁶See Robert Perrucci, in Morrissett, ibid., pp. 30-32.

³⁷See Paul Bohannon, in Morrissett, ibid., pp. 32-35.

identify the particular theory within or among any of the above disciplines, within which the meaning of a concept can be understood as fully as possible. It may appear then, that the concept "social class" can be systematically related to concepts such as "alienation" (a socio-psychological concept), "property" and "distribution" (economic terms), as well as to the notions of "culture contact" and "internal colonialism" (anthropological concepts).

Concepts, Problems and Facts

It has been observed that the question: What can I know? is dependent on the prior question: What can I ask? and this is dependent on what I know. Translated into the cognitive theory of concepts this means that the conceptualization and the formulation of the problems with which one tends to be concerned are in part related to the nature of the cognitive processes of which one is capable which in turn is dependent on the concepts and conceptual structures by which one is characterized.

All thinking is conceptual. According to Carroll,

All problem-solving--that is, thinking oriented toward the solution of problems--can be regarded as the manipulation of concepts that are evoked by the total situation and that may or may not be relevant to the task at hand.³⁸

Even the very "perception" and "selection" of a problem is probably largely determined by the nature of the concepts we

³⁸John B. Carroll, Language and Thought (Englewood Cliffs, N. F.: Prentice-Hall, Inc., 1964), p. 85.

hold, while the solution of the problem is also contained in the epistemology of those concepts. Gerald Holton sees the relation between a problem and its solution in this way:

Some appreciation or foreknowledge of the type of solution to expect is almost inseparable even from the recognition of the existence of a problem. . . . Of interest here is that some criteria are indeed needed to focus the attention on certain aspects of the total experience to the exclusion of the rest. . . . On the whole, the problem here is similar to that of a craftsman who must have at least some conception of the final product before he decides on the medium and tools for rendering the work. . . . In short, the scientist cannot just search; he has to search for something, and he must have an idea of what is to be expected--otherwise he may walk by the solution without recognizing it.³⁹

Every question has its own direction. As Schwab observes: "some subject matters answer when one set of questions is put. Another answers to another set. And neither will answer the questions to which the other responds."⁴⁰ And elsewhere Schwab states:

The subject matter may be--in fact, almost always is--far richer and more complex than the limited model of it embodied in the conclusions of the restricted inquiry. Thus, the first significance to education of the structure of a discipline: we cannot, with impunity, teach the conclusions of a discipline as if they were about the whole subject matter and were the whole truth about it.⁴¹

Disciplined inquiry then, is always restricted inquiry,

. . . the conclusions of a certain line of inquiry may be true, but most certainly they are not the whole

³⁹Gerald Holton, quoted by King and Brownell, ibid., p. 82.

⁴⁰Joseph J. Schwab, (1962), p. 203.

⁴¹Ibid., p. 199.

truth about that subject matter. . . . the bodies of knowledge [i.e., disciplines] would have defensible and valuable meaning to those who learn them had they been learned, not in a context of dogma, but in a context of the conceptions and data that determine their limited meaning and confer their limited validity.⁴²

Concepts thus have a determinant influence on the selection, formulation, and solution of problems in the social sciences. Further, disciplined inquiry itself is always "selective" and "restrictive" in terms of its direction, scope, and validity. King and Brownell describe the intimate connection between concepts and theory as follows:

The conceptual structure is the origin of inquiry. In theorizing, the investigator attempts to create a temporary, incomplete, but helpful symbolic representation to be used as a basis for further thought. This tentative theory can then be imposed on the phenomena of the field. Certain evidences [facts, events, behaviors, emotions, images, or compositions] seem to relate themselves clearly to the theory--some are "seen" in a new way, others are "seen" for the first time because the theory causes the investigator to look for them. To the degree that he can, the investigator revises the theory to fit the investigated phenomena more clearly. The theory determines what questions can be asked, determines the data required, helps determine what experiments or other inquiry can be performed. The theory gives the order for the assembly of data and gives keys to interpretation of these data, which reveal "knowledge" of the field. Knowledge seen in this light is tentative and limited to the genius of the theory builder, who in establishing his guiding conception opens up the richness of meaning, and also, ironically, limits the insight to be gained.⁴³

Schwab sees the relationship between conceptual inquiry

⁴²Ibid., pp. 199-200.

⁴³King and Brownell, ibid., p. 82.

and "facts" or "phenomena investigated" in a similar fashion.

What facts to seek in the long course of an inquiry and what meaning to assign them are decisions that are made before the fact. The scientific knowledge of any given time rests not on the facts but on selected facts--and the selection rests on the conceptual principles of the inquiry.⁴⁴

Moreover, scientific knowledge--the knowledge won through inquiry--is not knowledge merely of the facts. It is of the facts interpreted. This interpretation, too, depends on the conceptual principles of the inquiry.⁴⁵

From the preceding quotations and citations an intriguing picture emerges of an intricately patterned relationship between the "facts" or "phenomena investigated," the "concepts" or "conceptual structure" in the mind of the observer, and the "mode of inquiry" which, on the one hand, is an outcome of both, while, on the other hand selectively operates on the interpretation of the facts as well as on the formulation of new concepts. How this process may lead to different and even conflicting theories of the same "facts" observed, is illustrated again by Joseph J. Schwab.

In general, two collections of phenomena appear to be vastly different because we have used separate and distinct bodies of conceptions in studying them and discovering knowledge about them. Each such body of conceptions dictates what data we think we should seek, what experiments to perform, and what to make of our data by way of knowledge. If widely different conceptions are used to guide inquiries on two different collections of phenomena, we end inevitably

⁴⁴Joseph J. Schwab, (1962), ibid., p. 199.

⁴⁵Ibid.

with bodies of knowledge which exhibit few similarities and many differences. It is through the limiting or distorting lenses of these bodies of knowledge that we look at things. Hence, if the lenses distort or limit in different ways, we see things as different. The differences we see disappear if, but only if, a new conception is given birth which permits the study of both collections of phenomena in one set of terms and therefore makes for unity where diversity existed before.⁴⁶

Implications for Curriculum

Throughout the preceding discussion a number of implications, significant for the social studies curriculum were implicitly and explicitly recognizable. In the remainder of this chapter the various viewpoints are summarized and related to the social studies.

(1) Concepts have a "sense of belonging" in some larger more or less disciplined conceptual scheme. For the social studies teacher, this means that isolated or single concepts are, as a rule, devoid of meaning. King and Brownell present this point quite aptly:

The term concept has found its way into the lexicon of education in recent years, largely as a replacement for the obsolete and discredited term subject matter, which had come to be associated with isolated, highly factual, and unrelated bits of information and memoriter methods of teaching. To its credit, the curricular uses of concept substitute general, even fundamental, notions for particular ones and tend to give the idea of classes of phenomena and relationships between phenomena. Oftentimes, however, these concepts or generalizations are taught as a new and more complex kind of fact, generalizations which can be learned as one wants to know what the biologist or economist has learned.⁴⁷

⁴⁶ Joseph. J. Schwab, (1965), ibid., p. 10.

⁴⁷ King and Brownell, ibid., p. 81.

In order to avoid this artificial isolation of concepts into the social studies curriculum, some educators prefer to speak about "ordering the curriculum items" into "concept clusters."⁴⁸ According to John U. Michaelis et. al.,

A concept cluster is a set consisting of a basic or root concept and the concepts that are related to it and are needed to give the root depth and breadth of meaning.⁴⁹

Michaelis and Johnston provide illustrations of concept clusters with the basic concepts "major landforms: plains, hills, plateaus, mountains; and factors of production: land, labor, capital, management, government." There are a few difficulties associated with this distinction. For instance, how do we distinguish basic concepts from concept clusters? It seems also that a basic concept (like almost any substantive concept) can be broken down into related or subconcepts (e.g., mountain into: peak, edge, slope, slide, foot, valley). Furthermore, the concept "major landforms" has its roots in quite a different conceptual system than "factors of production." So it seems that the term "concept cluster" may stand for almost any type of concept without identifying its function. Thus, the concept "factors of production" has radically different theoretical and epistemological

⁴⁸ See Mauritz Johnson, Jr., "Definitions and Models in Curriculum Theory" in Short and Marconnit, ibid., pp. 42-50.

⁴⁹ John U. Michaelis and A. Montgomery Johnston eds., The Social Sciences, Foundations of the Social Studies (Boston: Allyn and Bacon, Inc., 1965).

implications in a Marxian frame of reference than it would in a Liberal theory of economics. The real significance of this concept lies in its particular scheme which deals with the relations among its concepts.

(2) Concepts may be systematized into some paradigms according to a number of criteria such as "level of abstraction," and "functional inclusion in scientific theory, models, or systems."

Of course, a simple array of concepts does not constitute theory. Not all concepts we deal with in the social studies curriculum are theoretical terms. Many concepts are simple prescientific categorical concepts possessing substantive, relational, or classificatory meaning, and so on. Terms such as "atlas," "agriculture," and "isomorph" may be clarified or defined as elements of relatively simple organized bodies of knowledge, i.e., "weak disciplines," in Phenix' terminology. Kaplan noted that concepts which are highly theoretical terms in one system may be mere presuppositions in another. Within the scientific system, concepts may move up or down the taxonomy. The question of which terms are theoretical and should therefore be included in the social studies curriculum is a problematic one. McClellan provides a humorous illustration of this point.

How can one tell in advance what terms will or will not organize themselves into scientific theories? The term "atom," we might guess from historical associations, is a natural for scientific theory. But Oedipus complex? Who would ever pick that for a key term in

scientific theory? Or . . . [the] beautifully neutral, non-theoretical term "chair." I am now creating an extension of psychoanalytic theory: the term chair is to be used for the culturally approved object on which the buttocks are placed. The form of a chair in any culture is a function of toilet-training practices and dependency relations. In Victorian culture, overstuffing the chair represents _____, while in contemporary America the Eames chair is a reflection of _____.

Is a chair a theoretical term? This question is a principle unanswerable? If there is a theory in which the word chair appears [or appears essentially] then the question may be answered practically. But it is always possible to rewrite existing theories so that chair appears: any three-dimensional lattice in probability theory shall be called a chair. But, you say, that is not the commonsense meaning of chair! Neither is any theoretical term exactly a commonsense concept. How far is too far?⁵⁰

(3) Concepts derived from the disciplined bodies of knowledge can be specified in terms of their meaningful role or function in the conceptual systems in which they are embedded. A corollary of this point is, that different concepts do different things: some describe, some assume, others explain, others again postulate, and so on. The teacher's business is, to identify clearly the function a concept fulfills. If he fails to appreciate this point he may unknowingly commit the fallacy of what Kaplan calls "functional ambiguity." Functional ambiguity is present in the idea that "an incapacity to work is due to "laziness" (the fallacy of employing a "descriptive concept" as though it were "explanatory"). Or, "the confused idea that an incapacity to love is the product of an oral fixation (a theoretical term is used as though it identified

⁵⁰James E. McClellan, ibid., pp. 66-67.

a causal agency).⁵¹

In his function of consulting social studies student teachers this writer has observed instances of this type of conceptual confusion on the part of the student teacher and the cooperating teacher as well. An illustration of this is the following list which appeared on a grade twelve blackboard: "causes or motives for imperialism: missionary zeal, adventure, racism, commerce, greed, humanitarian interests, the white man's burden, economics, self-interests, quest for military power." In her eagerness to bring in "every viewpoint" the teacher arrived at a hodge-podge of concepts of widely different functions, which rendered the key concept "imperialism" almost meaningless.

(4) Concepts embedded in disciplined bodies of knowledge are less equivocal, less ambiguous and can be more easily specified in terms of their function. We would therefore agree with Phenix that social studies problems can best be studied through the manipulation of concepts derived from disciplined knowledge. However, the student needs a wide experiential base that allows him to conceive of "problems" in the first place. Somehow the teacher has to bring "world problems that confront mankind today" into the classroom. And the student needs to be "furnished" with a sufficient basis of simple categorical concepts which will enable him to organize the confusing amount of information that

⁵¹Abraham Kaplan, ibid., p. 47.

reaches him via the news media. A teaching of simple concepts--such as common geographical terms, and names--through plain memorization techniques can probably be justified in terms of the power these concepts have in organizing experiences.

(5) Concepts are elements of a conceptual structure and are "carved" by the syntactical rules of that structure. That is, the systemic meaning of concepts reflect their substantive as well as their syntactical dimensions. Process and content cannot be taught independently of each other. Even the simplest categorical concepts involve processes of conceptualization, such as generalization from particulars, and deductive or inductive cognitive processes.

(6) Social studies concepts cannot meaningfully be related to the structure of any particular social science discipline, since there is neither a single conceptual, nor a single syntactical structure in any discipline. Instead, for a specification of meaning social studies concepts must be related to the particular scientific theory or system within which they function. Says Schwab,

. . . meaning is seriously distorted by replacing the appropriate structure by some other structure. Yet, in the past twenty years, we have warped and revised any number of subject matters in order to fit them to the bed of views about how and when and under what circumstance this or that is most readily learned. It would be well if, in future, we thought twice before we modified an item of knowledge in order to fit it to a psychological structure alien to it.⁵²

⁵²Joseph J. Schwab, (1965), ibid., pp. 36-37.

(7) The conceptual structures we hold are related to the way in which we conceive and formulate our problems. And these problems, in turn, are determinant of the nature of the solutions we arrive at and the types of new concepts we acquire. From point (6) and (7) it follows that if we wish to understand any concept or explain any belief we must first locate it in the conceptual system of which it is a part. That means that we must be able to recognize this system for what it is, and how and why it manifests itself in this characteristic form in theorizing. This point can be illustrated with an example from Concepts and Structure in the New Social Science Curricula in which Senesh gives an expose of organizing a curriculum around social science concepts. For our purpose we are particularly interested in his belief that the "central idea of economics is the scarcity concept, namely, that every society faces a conflict between unlimited wants and limited resources."⁵³ In the model Senesh presents, the concept of "scarcity" acquires causal and explanatory overtones. He states, "Because of scarcity, man has tried to develop methods to produce more in less time."⁵⁴ It is possible, however, to seriously challenge his claim that scarcity is the "central idea of economics."

First of all, Senesh can be attacked for his belief

⁵³ Lawrence Senesh, ibid., p. 24.

⁵⁴ Ibid.

that "scarcity" is "the central idea" of economics rather than of his particular theory of economics. Of course, he does not speak for all economists. Outside the bounds of Senesh' model the concept of scarcity becomes quite ambiguous. One could even speak of the fallacy of functional ambiguity with respect to the use of this term. Scarcity may just as well be viewed as a descriptive statement which only describes economic conditions but does not explain them, nor does it give causes. Several scientists have argued that scarcity of food and the resulting hunger epidemics is a matter of "distribution" rather than of technical inability to produce. That is to say, there is not necessarily something like a universal law that says that there has to be scarcity. One could talk about the wheat crises in Canada, which is a crisis of abundance rather than of shortage. One could point at the fact that in the U.S.A. government is paying huge sums of money to farmers and plantation owners for not producing and one could cite the fact that huge areas of fertile land in Latin America are artificially kept bare by international capital, also in order to keep market prices high. There are numerous other examples of productivity for waste or destruction rather than for need. These comments seem to put the validity of the principle of scarcity as a central concept for teaching social studies in a peculiar light. Accepting the concept of "scarcity" as a key concept determines the ways in which we will perceive some urgent world problems,

and it possibly prevents us from "seeing" solutions which alternative socio-economic theories might offer us.

(8) The dependence of knowledge on the conceptual and inquiry structure of theories implies that any body of knowledge is likely to be of only restricted and temporary significance.⁵⁵ This has also certain implications for the recent attempts of unifying the social sciences by trying to define cross-disciplinary concepts and inquiry processes.⁵⁶ Schwab is quite reserved on the issue of unifying the social sciences through inter-disciplinary attempts. And Phenix remarks, "The difficulty with cross-disciplinary studies is, that they offer a temptation to shallow, nondisciplined thinking because of the mixture of methods and concepts involved."⁵⁷ Social studies students are constantly crossing discipline lines and teachers must be extremely cautious for the temptation of "finding the common denominator," that is to "oversimplify" by assimilating matters which are essentially different. Rather than putting our faith in "these key concepts" or "those syntactical rules" we should attempt to arrive at a theory or model of conceptualization which may provide us with a view from above.

⁵⁵ Joseph J. Schwab, (1965), ibid., p. 13.

⁵⁶ Compare for example the list of Major Concepts for Social Studies by Roy A. Price, et. al. eds., ibid.

⁵⁷ Philip H. Phenix, (1964), ibid., p. 319.

CHAPTER VI

A PARADIGM OF CONCEPT PATHOLOGY

The preceding four chapters have provided this chapter with a context for the development of a paradigm on the pathology of concepts. Concept pathology is the result of a kind of conceptual ambiguity and conceptual confusion that may find its roots in any of the issues on concepts discussed in the above chapters. Thus, there exists a form of conceptual ambiguity corresponding to the epistemological origin of concepts (chapter two), to the cognitive usage of concepts (chapter three), to the sign or word meaning of concepts (chapter four), and to the systemic function of concepts (chapter five). To say it differently, the epistemological origin, the cognitive usage, the sign meaning, or the systemic function of a concept is designated as ambiguous when the use or the interpretation of the concept is unequivocal, unclear or imprecise.

The purpose of this chapter is to list some instances of concept pathology related to each of the aforementioned kinds of conceptual ambiguities. In many cases there is a reference back to parts of the earlier discussions so that the items of concept pathology can again be placed in a meaningful context. The selection and variety of the following instances of concept misuse is rather arbitrary. Different labels could have been applied and

more cases could have been listed. A certain amount of overlap between some items of the paradigm is probably unavoidable. The same concepts may be suffering from various forms of conceptual pathology.

AMBIGUITY OF METAPHOR

Ia. Hypostatization (see: pp. 54-55)

Every concept finds its origin probably in some metaphor (see: pp. 19-23). But what happens when the original metaphor has been forgotten, outmoded, or when the original metaphor has turned obsolete? Stephen Pepper¹ reserved the term hypostatization for the case of a word having lost contact with its root metaphor. Hypostatized terms may have turned into "empty" or "fake" concepts, or they may have become pseudo-scientific concepts for which the root metaphor has become ambiguous. In both cases the concept is treated as if it "really" identified some definite meaning. In the social sciences one can find instances in which an entire "theory" has been altered or abolished while some of its concepts are still being maintained and used. Some psycho-analytic terms may be considered examples of hypostatization. But also concepts such as the popular Darwinian notions of "struggle for survival," and "survival of the fittest," and the controversial anthropological

¹Stephen Pepper, World Hypotheses (Berkeley, Calif.: University of California Press, 1961).

concepts of "race," "under-development," "imperialism" and many others have become hypostatizations since these concepts have lost their meaningful theoretical context. For example, the concept "race" is still quite commonly used in social studies curricula. That is, societal problems are "analyzed" and "explained" in terms of a concept that has become obsolete in its "original" meaning. Various anthropologists have argued for abolishing the concept "race" from social science theory since it can no longer explain the phenomena it purports to explain. The use of the concept "race" leads too easily to undesirable prejudices and biased beliefs.

A meaningful and functional explanatory concept is constructed in the process of careful theory building. One cannot just let a term mean anything. A physicist does not ask his students to construct and to adopt their own personal concepts that are necessary to explain certain physical science phenomena. So why should a social science student be doing this for the interpretation and explanation of social science phenomena? This is a somewhat puzzling question that one could pose to an otherwise interesting practice that has been applied to the concept of "imperialism" as a part of the Illinois Curriculum Program.² But

² Illinois Curriculum Program, "Students Develop the Concept Imperialism," Concepts in the Social Studies, eds. Barry K. Beyer and Anthony N. Penna (National Council for the Social Studies, Bulletin No. 45, 1971), pp. 67-75.

hypostatized terms cannot be rendered meaningful and functional by having the students more or less arbitrarily assign meaning to the concepts. Rather, the social studies teacher should attempt to have his students carefully study the systemic history of a concept such as imperialism. The question to be asked is: Can we still determine how and in what social science theory the concept did or does get its functional meaning? And, can the concept be maintained in its original or in a modified form? Or do we have to consider the concept meaningless, i.e., useless for explaining present day social science problems?

Ib. "Empty" or "Fake" Concepts

Instead of becoming pseudo-scientific concepts, hypostatizations may have turned into so-called "empty" abstractions or "black box" concepts. In this case, it is even in theory impossible to trace back the concept to its root metaphor. Concepts like spirit, essence, God, mind and matter are such hypostatized terms. Empty or fake concepts are often used to explain phenomena that one cannot (or that one does not want to) explain in different terms. Thus, the South African white man or the "rightist" Westerner may state that it is "God's will" that the white man dominates and rules over the black man. The term "God's will" performs the function of an empty concept. A pseudo-scientific concept would claim that it is the principle of "survival of the fittest" or "nature's will" that sends the black man into

poverty and into cultural insignificance. The social studies teacher has to be keenly aware of the existence of these "empty" concepts, "fake" concepts, or "black box" concepts.

Ic. Reification (see: pp. 16-19, 83)

Reification is the phenomenon of turning abstract concepts into "real" or "concrete" entities. The physical sciences as well as the social sciences contain many instances of reification of abstract terms and their corresponding concepts. For example, in the physical sciences one postulates the existence of essentially invisible particles, such as photons, which "move" with certain speeds and in a certain manner. And in the social sciences there are notions such as Adam Smith's concept of "the invisible hand" which is supposed to solve society's socio-economic problems and injustices by automatically steering the economic processes into a direction that is "good for all."

The notion of reification is already contained in the idea that there is something like an external world which man sets out to "catch" through the use of his verbal concepts (see: pp. 16-19, 50-52). Once certain verbal concepts have been "invented" they tend to acquire reifying qualities. Korzybski pointed out that people do behave as if they identified words with things. People tend to react and respond to verbal concepts as if these concepts have

acquired an external reality.³ What is the significance of reification? In Von Bertalanffy's words:

In the extreme case, of course, reification amounts to schizophrenia, making the patient's thoughts and words into internal realities. But the borderline always remains precarious, particularly if there is mass schizophrenia and, naturally enough, one madman cannot see the madness in others because he shares it. This is, roughly speaking, the world scene in our time.⁴

The social studies teacher especially has to be aware of the occurrence of reified concepts. The social studies curriculum employs many terms such as "human nature," "essential man," "innate competitiveness," "the free world," "democratic nations," that are ambiguous in this respect. The fallacy is that because one lets the student search for an adequate conception of the term "human nature," there must indeed be something of the kind (see: pp. 57-58).

Id. The Question of Implicit Assumptions (see: pp. 41-43)

Often we employ certain concepts without realizing that unwittingly we have introduced a number of underlying or "invisible" assumptions that are caught up in the term (see: pp. 22-23, 87). It is the purpose of conceptual clarification to make explicit the nature of beliefs and data subsumed under the concept. For example, some

³Anatol Rapoport, "What Is Semantics," Classics in Semantics, eds. Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), p. 348.

⁴Ludwig von Bertalanffy, "On the Definition of the Symbol," Psychology and the Symbol, ed. Joseph R. Royce (New York: Random House, 1965), p. 59.

politicians promise their electorate to wage and win the "war against poverty." And such an endeavor seems an attractive promise indeed. The question is, however, whether it can be done. If one interprets the concept "poverty" simply as an undesirable socio-economic concept alien to the socio-economic system at large, than a "war" against poverty appears quite a feasible and noble project. But if the concept "poverty" is considered a structural element of a system and thus a function of a particular mode of social organization, then the attempts to end "poverty" become a futile effort (unless the structure of the total system undergoes a change).

Another term much used in the social studies is the concept "pluralism." Canadian society is called a plural society in which the various cultural groups occupy their places like pieces of glasswork in a mosaic. Once we accept the concept pluralism to refer to the socio-political character of Canadian society, all kinds of underlying assumptions of the term have the effect which allows us to talk meaningfully about the coming of "a just society" in which all minority and majority groups are integrated in a just way. However, the proper meaning of the term pluralism refers to a society in which no one group can dominate and exploit the collective of the others. Therefore, some social scientists are not so certain that the concept applies to most western nations. Instead of the concept pluralism these scientists may resort to the counter concept of

stratification theory in their attempts to analyze and interpret problems of social justice, minority group integration and problems of power in the democratic process.

The importance of implicit assumptions as a category of concept pathology for the social studies is that the main concepts of any body of knowledge must be examined in terms of their underlying assumptions. A comparison of key concepts with their rival and counter concepts may assist the social studies teacher in his task.

Ie. Tautological Use of Concepts (see: p. 84)

A concept may be misused tautologically when a teacher is using a difficult concept in order to "explain" or "define" another problematic social science concept. A concept such as "institution" is often used this way. Another term or set of terms is resorted to in order to explain the concept institution. No definition by substitution will probably be sufficient until the student can understand the concept institution in a meaningful theoretical context and until he is provided with concrete examples of the term.

If. Anthropomorphization (see: p. 53)

Anthropomorphization is the fallacy of ascribing human characteristics, qualities or human powers to non-human concepts. Bertalanffy mentions the century-long struggle in physics from an anthropomorphic concept of "force" to an abstract notion expressing certain quantitative relationships.

In the social sciences we speak of anthropomorphisms when we hear about "societies" that have "fundamental needs for survival" or when "institutions" are referred to as "organismic systems." Also, the term "agent of change" is probably a social science concept that obtains anthropomorphic overtones, and as a result acquires "false" explanatory power. An instance may be given within the context of what an anthropologist terms "the latest myth of racism." The newest racist argument attempts to "explain away" the sad social conditions of the Black man in the United States and the Red man in Canada by appealing to abstract concepts such as "urbanization," "equality before the law," "modernization," and "migration," which purportedly make it possible to change the plight of the Negro and the Indian (if it were not the case that they are "really" inferior to the White man). In these examples concepts derived from social theory become active "agents" of change.

AMBIGUITY OF COGNITIVE USAGE

IIa. Conflicting Perspectives

Concepts may give rise to misunderstanding and "shorts" in communication because a concept may have a different meaning for different people. In chapter three the notion of perspective has been defined in terms of the kinds of cognitive experiences by which a person is characterized and with which he tends to view things in a certain manner. Thus, a middle-class white youth and a colored

ghetto-youth may have quite dissimilar frames of references for the concepts police and government. Particularly concepts such as freedom and liberty are frequent examples of conflicting perspectives. The following part of a speech by Abraham Lincoln illustrates this point:

We all declare for liberty; but in using the same word we do not all mean the same thing. With some the word liberty may mean for each man to do as he pleases with himself, and the product of his labor; while with others the same word may mean for some men to do as they please with other men, and the product of other men's labor.

Here are two, not only different, but incompatible things, called by the same name, liberty. And it follows that each of the things is, by the respective parties, called by two different and incompatible names--liberty and tyranny. . . .

The shepherd drives the wolf from the sheep's throat, for which the sheep thanks the shepherd as his liberator, while the wolf denounces him for the same act, as the destroyer of liberty--plainly, the sheep and the wolf are not agreed upon a definition of the word liberty--and precisely the same difference prevails today among us human creatures--and all professing to love liberty. Hence we behold the process by which thousands are daily passing from under the yoke of bondage hailed by some as the advance of liberty, and bewailed by others as the destruction of all liberty!⁵

The concept of perspective is pedagogically a very useful one for the social studies. The teacher should be aware that he must handle his curriculum concepts in a manner which is not in conflict with the meanings certain concepts may have obtained in the life experiences of the students. In order to reach his curriculum goals a teacher must first familiarize himself with the concepts

⁵Irving J. Lee, Language Habits in Human Affairs (New York: Harper & Brothers Publishers, 1933), pp. 45-46.

in terms of which the student is viewing the problem situation. Having done this he may be able to decide what is didactically the best strategy of presenting the new concepts to the student. (see: pp. 46-50).

IIb. Misuse of Process and Product Concepts

A concept is used inappropriately when too little attention is given to the exact nature and meaning of the concept (see: pp. 62, 90). This may happen when we treat a "process" concept as if it were a "static" concept. Through our use of words we "snap shot" and tend to "fix" the ever changing dynamics of our reality. Thus, after many months we continue to call the items in our medicine cabinet "medicine" although the therapeutic power may have been lost and the chemicals may in time have turned the "medicine" into something poisonous.

Concepts such as "education" and "science" tend to be interpreted as "product" concepts rather than "process" concepts in statements like "He received his education." And social science concepts such as "human nature" and "human needs" are often treated as if they identified something essentially "given" and "unchanging" rather than a human property that is contingent upon other social and cultural processes. So, in order to avoid this inappropriate use of concepts teachers must carefully examine the exact nature of such concepts.

IIc. Misapplication through Ignorance (see: p. 59)

Another form of concept pathology related to the preceding category is the misapplication of concepts through ignorance. This instance of concept misuse seems very simple. People do not know how to apply a concept because they do not know the meaning of that concept. We all may occasionally talk about matters we do not know enough about. Disagreements in arguments often may be resolved by clarifying the precise meaning of the concepts under discussion (see: p. 26).⁶

IIId. Conceptual Fixity

A person may be conceptually fixated or bound to the meaning and function a particular concept possesses in a certain theoretical system or conceptual configuration without realizing that this concept could acquire new meaning, new explanatory power and new applicability if placed in a different conceptual system. Conceptual fixity is a very useful educational concept. It is related to the notion of perspective and the way in which people tend to become encapsulated by the conceptual apparatus that

⁶However, there exists a certain paradox in the use of concepts in every meaningful communication. The concepts (or rather conceptions) we hold are never exactly identical to the concepts other people hold. Person A's concepts of a topic of communication have to be sufficiently similar to the concepts person B holds of that topic. If there is too much difference between the concepts people employ, meaningful communication is not possible. If there is too little communication is probably not necessary.

determines their perspective. The notion of conceptual fixity has been quite extensively discussed in the following pages: 19-23, 40, 43-48, 60, 121-123.

IIe. Cultural Bias (see: p. 58)

Cultural bias is manifest through the cultural categories in terms of which man conceptualizes and responds to the world around him. Whorf and Sapir provided excellent linguistic studies which illustrate the fact that different cultures tend to sort out the world in terms of different categories. The problems which often accompany accurate translations from one language into another also demonstrate the existence of cultural or linguistic bias.

Especially the connotative meanings of terms seem prone to cultural bias. An editorial in Saturday Review is worth citing. The article discusses so-called "plus-minus words" and "dangerous misconceptions that take root in language and that undermine human values." The following are taken from different passages:

The words "black" and "white," as defined in Western culture, are heavily loaded. "Black" has all sorts of unfavorable connotations; "white" is almost all favorable. . . . Mr. Davis, a Negro, concluded on the basis of a detailed study of dictionaries and Roget's Thesaurus that the English language was his enemy. In Roget's he counted 120 synonyms for "blackness," most of them with unpleasant connotations: blot, blotch, blight, smut, smudge, sully, begrime, soot, becloud, obscure, dingy, murky, threatening, frowning, foreboding, forbidden, sinister, baneful, dismal, evil, wicked, malignant, deadly, secretive, unclean, unwashed, foul, blacklist, black book, black-hearted, etc. Incorporated in the same listing were words such as Negro, nigger, and darky.

In the same Roget's Mr. Davis found 134 synonyms for the word "white," almost all of them with favorable connotations: purity, cleanness, bright, shining, fair, blonde, stainless, chaste, unblemished, unsullied, innocent, honorable, upright, just, straightforward, genuine, trustworthy, honesty, etc. "White" as a racial designation was, of course, included in this tally of desirable terms.

No less invidious than black are some of the words associated with the color yellow: coward, conniver, baseness, fear, effeminacy, funk, soft, spiritless, poltroonery, pusillanimity, timidity, milksop, recreant, sneak, lilylivered, etc. Oriental peoples are included in the listing.

To be sure, Western languages have no monopoly on words with connotations that affect judgment. In Chinese, whiteness means cleanliness, but it can also mean bloodlessness, coldness, frigidity, absence of feeling, weakness, insensitivity. Also in Chinese, yellowness is associated with sunshine, openness, beauty, flowering, etc. Similarly, the word black in many African tongues has connotations of strength, certainty, recognizability, integrity, while white is associated with paleness, anemia, unnaturalness, deviousness, untrustworthiness.⁷

Cultural or linguistic bias is something very powerful and very subtle at the same time. As the editor says, "language infects the subconscious of most Western people from the time they first learn to speak."⁸ What the social studies teacher may wish to strive for is not so much a change of language or taboo-concepts as an awareness of the power of verbal concepts to condition attitudes.

⁷ Nogman Cousins, "The Environment of Language," Saturday Review, April 8, 1967, p. 36.

⁸ Ibid.

AMBIGUITY OF MEANING

IIIa. Intentional Interpretation

This type of fallacy refers to the deliberate interpretation of texts in order to misdirect the listener--either consciously or unconsciously--for some ulterior motive.

Consider a comical example introduced by the following question: Does Christianity condemn the methods of twentieth century finance? Doubtless there are some awkward words in the Gospels, but a little "interpretation" is all that is necessary. Ogden and Richards cite a specimen of the exegetic of "the late Dr. Lyman Abbott, pastor, publicist, and editor, which through the efforts of Mr. Upton Sinclair, has now become classic."⁹

Jesus did not say "Lay not up for yourselves treasures upon earth." He said "Lay not up for yourselves treasures upon earth where moth and rust doth corrupt and where thieves break through and steal." And no sensible American does. Moth and rust do not get at Mr. Rockefeller's oil wells, and thieves do not often break through and steal a railway. What Jesus condemned was hoarding wealth!¹⁰

Deliberate interpretation of the meaning of concepts can especially occur when the meaning of a concept is not unequivocally clear or when the context within which the concept appears is ambiguous or uncertain. This type of

⁹C. K. Ogden and I. A. Richards, "Thoughts, Words and Things," Classics in Semantics, eds. Donald E. Hayden and E. Paul Alworth (New York: Philosophical Library, 1965), p. 258.

¹⁰Ibid.

concept pathology can probably be reduced or evaded by contemplating the following questions: From what frame of reference (i.e., political, ideological, confessional, or religious background) does the speaker or writer interpret the meaning of these concepts or this text. What meaning does he assign to the text? That is, what does he "make it mean?" And why does he construe his interpretation that way? Or, what could be his conscious or unconscious motives for making this kind of interpretation (see: p. 91)?

IIIb. Manipulative Techniques¹¹

It is well-known fact that language can be used for purposes of social control and manipulation, especially by governments, advertising companies, political parties, and also by educational institutions.

Repetition. First, there is the manipulative technique of "repetition." In order to achieve a desired attitude and belief the audience is subjected to a monotonous repetition of some verbal stimulus. Numerous examples can be sought from the advertising market, political billboards, and so on. A teacher may unwittingly or deliberately sway most of his students into a particular belief or opinion by frequently stressing his own preferences or social interpretations. A similar effect is probably sought by

¹¹The main categories of this item are borrowed from Joyce O. Hertzler (1965), in her discussion on language as a means for social control.

Spiro Agnew when he inadvertently refers to part of the political student body as the "criminal left," always linking up the term "left" with the term "criminal" in order to create a negative emotional climate towards this group. And the same is true for leftists when they refer to the police and to governmental administrators as "pigs" or "fascists."

The strategic use of silence. A second very effective and pertinent manipulative technique is "the strategic use of silence." It seems that deliberately ignoring important social issues and refusing discussions on these matters is often more effective than publicly engaging oneself in rational communication, sometimes even more so than outright contradiction or denuciation. These techniques may be employed by politicians, or governments, but also by teachers or parents who refuse to acknowledge awareness of otherwise relevant or even urgent business. Thus it may appear that in many social studies classrooms "Marxism" and F.L.Q. are taboo-concepts while some parents may feign ignorance on the subject of "sex."

Censorship. Related to the preceding manipulative technique is the practice of "censorship," widely recognized by rulers as an effective means for controlling public opinion. Censorship may also be detectable in the educational institutions as a form of control exercised by teachers over students, or by administrators over teachers and students. For example, teachers may be forced into

vocalizing the administrator's stand on questions of drug-use, student participation, student unrest, and similar issues.

Catchwords and slogans. Finally, there is the danger of manipulation through the use of "catchwords" and "slogans" employed in the endeavor to persuade the public into forming a favourable and approving attitude. How many "projects" are obtaining generous financial assistance under the label of some fashionable but otherwise rather meaningless catchword or slogan? A catchword or slogan also labels and stereotypes educational or social objectives and definitions. Examples of social or political catchphrases and words are "peace," "liberty," "prosperity," "the war against poverty," "all power to the people," "making the world safe for democracy," "law and order," "fight pollution," "make love not war," and so forth. According to Hertzler, the function of slogans is to arouse known social attitudes and to produce conditioned responses. If repeated often enough slogans allay doubt, suspicion and criticism, and smother independent thought. Within the educational enterprise token recognition may be given to phrases such as "education for the future," "student government," "student power," "flexible curricula," "student self-actualization," "value-free curriculum," "learning through discovery."

IIIc. Magical Use of Concepts

Magical use of concepts refers to the idea that a

change in name which stands for a certain concept will somehow change--for better or worse--the nature of the "thing" which the concept refers to. The rhetorical device known as euphemism is an everyday example of this. Somehow, it is felt that the ascription to life facts of the right kind of names may have something to do with "bettering" the facts.¹² Although words have obviously no magical power, the psychological effect of using "the right kinds of words" is a well known phenomenon in the world of advertisement and propaganda. On the magical power of words, Aldous Huxley said:

Words play an enormous part in our lives and are therefore deserving of the closest study. The old idea that words possess magical powers is false; but its falsity is the distortion of a very important truth. Words do have a magical effect--but not in the way that the magicians supposed, and not on the objects they were trying to influence. Words are magical in the way they affect the minds of those who use them. "A mere matter of words," we say contemptuously, forgetting that words have power to mold men's thinking, to canalize their feeling, to direct their willing and acting. Conduct and character are largely determined by the nature of the words we currently use to discuss ourselves and the world around us.¹³

Verbal magic is still prevalent in, for instance, popular notions about the nature of human nature. This phenomena is found in opinions held by the general public and educators and even by some popular writers in anthropology in ideas such as "innate aggressiveness,"

¹²I. J. Lee, (1933), ibid., p. 162.

¹³Max Black, Critical Thinking (New York: Prentice-Hall, Inc., 1946).

"competitiveness," and "man's killing instinct." There is little difference between the notion of "a demon" obsessing an individual and controllable only by exorcism, and the notion of an "urge to kill" or "killing instinct" similarly obsessing a man, driving him to murder. Neither the concept "demon" nor the concept "killing instinct" have explanatory power in any well respected social science theory.

Popular discussions in social studies classrooms on questions such as: Must there always be war? Can man ever hope to live in peace and cooperation? Are armies necessary? are frequently rounded off by appealing to concepts such as "man's innate competitiveness," "his natural tendency for aggression," "his killing instinct," or "his inborn greediness." Social studies teachers may wish to become aware of this kind of conceptual pathology.

IIIId. Oversimplification

A statement of meaning that leaves out critical details about a concept or a problem is an oversimplification of that concept or problem. One frequent instance of oversimplification is the attribution of single causality to complex problems. For instance, there is the practice of imputing all events that are disconcerting or socially ill to "foreign inspiration." There is a particular danger of oversimplification inherent in the idea that social studies is popularization of "real" scientific theory. In order to give the student a "taste" of psychology, anthropology,

economics, sociology, geography, and philosophy they may be confronted with an oversimplified representation of the main concepts from these social sciences (see pp. 122-123).

IIIe. Overgeneralization

This is a fallacy quite similar to oversimplification. Overgeneralization is at work where a concept does not satisfy the necessary criterion of specificity. Overgeneralization is almost characteristic, it seems, of so-called universal concepts or universals. Clifford Geertz¹⁴ provides an example when he discusses the relationship between culture and human nature. In their endeavor to determine and define what is the essence of being human, anthropologists have frequently made use of what A. L. Kroeber called "fake universals." Universal concepts such as "religion," "marriage," or "property" have been used as representative traits that are truly universal, shared by all mankind. However, in this attempt to find the "lowest common denominator" of human nature it is fallaciously assumed that these empirical universals do have the same content in societies as different as the Tani from the Dutch. This is obviously a false conception. In attempting to meaningfully compare so-called universal concepts across

¹⁴ Clifford Geertz, "The Impact of the Concept of Culture on the Concept of Man," Man in Adaptation, The Cultural Present, ed. Yehudi A. Cohen (Chicago: Aldine Publishing Co., 1968).

widely different cultures one has to strip these concepts of all, or almost all, of their meanings.

IIIIf. "Stretching the Meaning" of Concepts (see: p. 87)

"Stretching the meaning" of concepts is an instance of concept pathology that may be exemplified with terms such as "dignity of man," "freedom," "equality," "justice," "empathy," and "loyalty" which tend to appear in statements of general objectives or rationales for the social studies curricula.¹⁵ Some concepts are very difficult to define in unequivocal terms and consequently they tend to become rather meaningless and vague of content.

IIIIg. Professional Jargon (see: p. 85)

Under this category fall those scientifically formulated concepts which often seem to be invented to mystify rather than clarify things. According to Meerloo,¹⁶ much craft and professional terminology were originally intended to exercise a magic impression on laymen. We also speak of concept misuse when certain professional terminology is transferred from one discipline to another while being used in essentially inappropriate contexts (see: p. 89).

¹⁵For instance, the above list of terms has been quoted in full from the most recent Junior and Senior High School Curriculum Guides for the Social Studies, issued in the Province of Alberta (Department of Education, 1970), p. 2.

¹⁶Joost A. M. Meerloo, Conversation and Communication: A Philosophical Inquiry into Language and Human Relations (New York: International Universities Press, 1952).

This may be the case when concepts from the physical or biological sciences are being applied to explain social or cultural phenomena. Another instance of professional jargon is the faddy and fashionable tribute paid to terms currently in vogue. Until recently it was the "cry" for "structure" and "education for survival" to which every educator had to "tune in." And the latest call seems to be for "relevance," "values," and "activism." The professional scholar with a keen eye to an academic career develops a certain sensitivity to what "catchwords" are "hot" and marketable.

IIIh. Emotive Bias

Many concepts are emotion-charged although people may not always be aware of the more or less subtle negative or positive connotations. Sometimes, however, terms are deliberately employed to arouse emotional associations and stereotyped beliefs and ideas. In this situation concepts may function as provocative agents to "trigger off" emotion-loaded and belief-dominated action. With reference to a similar discussion Hertzler¹⁷ made a distinction between "honorific" names or phrases and "humilific" terms.

The qualification honorific usually implies is that the recipient significantly conforms to some "popularly developed value-judgment regarding a type of social relationship. It is intended to be complimentary, elevating, even

¹⁷J. O. Hertzler, (1965), *ibid.*, pp. 290-293.

exalting."¹⁸ Thus we may call the person "citizen," "moderate," "philanthropist," and so on. Also slogans like "Black is beautiful" expressing a search for positive self-identity of a minority group are examples of honorific usage.

Humilific terms are intended to be derogatory, denigrating, degrading and depreciatory. They perform the function of singling out groups or individuals into a socially disapproved class of people. Humilific terms seem to abound in social commentary. Thus, we meet terms such as "traitor," "reds," "communist," "trash," "pig," "fascist," "un-American," "radical," and "do-gooder."

It is almost impossible to discuss fairly social issues in social studies classes without paying close attention to the overt or covert ways in which concepts such as "freedom fighters," "terrorists," "welfare," and "foreign aid" call forth positive or negative emotional responses. Through the use of emotion loaded concepts, arguments may be rendered fallacious and prejudiced which may lead to ill-conceived understandings of social situations.

AMBIGUITY OF FUNCTION

IVa. Functional Ambiguity

The idea of functional ambiguity has been discussed rather extensively in the preceding chapter (see: pp. 99-100, 106-107, 111, 118-119). We speak of functional

¹⁸Ibid., p. 291.

ambiguity whenever a concept is misused in scientific theory. For instance, when observational and theoretical terms are treated as if they explain something, or when explanatory constructs are used in the function of descriptive or theoretical terms.

IVb. Category Mistake (see: pp. 79-80)

One is guilty of making a category mistake if ostensive or concrete meaning is attributed to concepts that carry essentially more abstract or theoretical meaning. The idea of category mistake is closely related to the fallacy of reification and hypostatization. However, the emphasis in the case of category mistake is on the meaning aspect of concepts. We may also speak of category mistake when theoretical meaning is bestowed on concepts that are essentially only concrete terms with ostensive meaning (see: pp. 117-118).

IVc. Ideological Prejudice

Like the concept "ideology" (as expounded by Karl Mannheim in his Ideology and Utopia), the conceptual schemes through which men grasp their own society are rooted in the existential basis. That is to say, the belief systems of a society tend to be a function of the social structure, the mode of production and the level of technology (of the various groups) of that society. Especially in the arena of political and ideological discourse it becomes obvious therefore, that the same verbal concepts do not always have

the same meanings. Well known examples of this sort are concepts such as "justice," "liberty," "loyalty," "democracy," and "truth." Ideological prejudice may be detected by asking what political or socio-economic interest people may have in interpreting the concepts in the manner they do.

CHAPTER VII

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

This study was concerned with inquiry into the nature of concepts and their use and misuse in the social studies. In the introductory pages a distinction was made between the use of concepts in curriculum objectives and the use of concepts in the study of education. The usage of concepts in curriculum objectives enables the educator to organize and to teach a body of knowledge. The concept as an object of study of education provides the educator an understanding of his usage of that body of knowledge.

In this study the concept of concept was examined from several related perspectives. Epistemologically, the concept reflects a human relation between the knower and the object known of the so-called "real world." This principle translates the physical external world into a human reality. Man can only "know" the physical external world in a "human" way, i.e., there is no vantage point from where he can see "absolutely." In categorizing the world into concepts man makes use of metaphors. But every selection of metaphor involves some selection of principle. That is, some assumptions and presuppositions are made. If the metaphorical character of concepts has been forgotten or has been taken for granted, some fallacious cognitive functions may

generate phenomena such as conceptual fixity. A person may be conceptually fixated or bound to the meaning and function a particular concept possesses in a certain theoretical system or conceptual configuration without realizing that this concept could acquire new meaning, new explanatory power and new applicability if placed in a different conceptual system.

Thus, concepts may influence the product of man's knowing, i.e., his reality. That is, concepts may have a directive, limiting, or even distorting influence on man's thinking. Conceptual pathology corresponding to the cognitive usage of concepts has to be studied carefully in terms of how concepts are being used. For example, a person's perspective may be studied by examining the meaning he assigns to certain concepts, the counter-concepts he takes into consideration, the concepts he leaves out, the structure of the categorical apparatus in terms of which he thinks, and the conceptual system or theory in which the concepts are embedded.

Instances of concept pathology which occur frequently in curriculum statements are ambiguity of concept meaning and ambiguity of concept function. The kind of meaning a person assigns to a verbal concept is a function of the particular device he uses for specifying meaning. The study examined six types of strategies for defining concept meaning. Concepts are always dynamic and open in meaning. However, there are various types of openness of which educators must

be aware.

The meaningful functions of concepts may be studied by analyzing concepts into classification systems. The roles concepts play in social science theory are of special significance for the social studies teacher. Functional ambiguity may be identified and avoided by carefully examining how a particular concept is used and how it should be used in a social science theory. Social science concepts are only meaningful in the total conceptual and syntactical structure of the system or theory in which they are embedded.

As a result of their systemic structure and function, specific concepts can only entertain certain "problems" and certain "facts." Different concepts, or concepts in different systemic settings may consequently address different "problems" or generate different interpretations of the "same problems" and "facts." In other words, concepts are selective in terms of the problems they allow us to "perceive," and in terms of "the way" they allow us to perceive problems.

Concept pathology is the result of a kind of conceptual ambiguity and confusion that may originate in the epistemological genesis, the cognitive usage, the sign meaning, and the systemic function of concepts. Chapter six lists a paradigm of instances of concept pathology with illustrations and references to the general discussion of the thesis.

Conclusion

The word concept is not a new term. It has had certain usage in some theories of psychology and lately the term has become increasingly popular in educational writings. However, an increased usage of a term and an increased understanding of that usage do not necessarily go hand in hand. It was pointed out that the role of the concept in curriculum statements and the idea of concepts as an object of study for education are not the same thing. Up to the present many educators have been using the notion of concept for curriculum and teaching purposes, but in order to gain a better understanding of this usage there is a definite need for educators to attend to the nature of the concept of concept itself. They need to know how concepts are related to knowledge, and to our understanding of things, how the notion of concepts may clarify the notion of thinking in terms of concepts, how they construe meanings of concepts, and what functions concepts perform in terms of larger theories and systems.

It was somewhat enthusiastically posed in the introductory pages that the study would hopefully contribute to an increased understanding of the notion of concept. In retrospect, that optimistic beginning may have had some immodest overtones. What the writer did gain from this study is a definite sense of the many problems and difficulties involved in making statements pertaining to the nature, use and misuse of concepts in the social studies.

This study has certainly not exhausted the realm of problems associated with the use and misuse of concepts in the social studies. Nevertheless, it is hoped that this study may serve a useful purpose for curriculum developers and teachers. In the process of building curriculum the educator may find it useful to take the various propositions of this thesis into consideration. The notion of concept is implicit in questions such as: What knowledge should be included in the curriculum? What are the key-concepts? In what form should these concepts be included in the curriculum? Can the selected concepts be meaningfully isolated from their structural or systemic context? How can we specify the meaning of the curriculum concepts? How relevant are these concepts to the educational or societal problems that the curriculum rationale is concerned with? What is the bearing of counter-concepts on the concepts included in the curriculum? And what meanings do the concepts acquire in different theories?

For the teacher who is doing the instructional planning and the actual instructing, this thesis may prompt him to raise questions about the didactical value of the concepts contained in the instructional objectives: What is the relevance of these concepts for the students? How rigorous are the concepts in their explanatory and theoretical implications? Considering the cognitive and affective structure of the learner, how will the student interpret and conceptualize the new concepts? In analyzing concepts, what

cognitive styles require what teaching styles? How should the concepts for instruction be sequenced and structured? How can the teacher as well as the student become aware of the various instances of concept misuse? And, importantly, can the students be taught the notion of concepts and conceptual fixity?

This thesis has been of a conceptual rather than of an experimental or formal theoretical nature. The conclusions to be drawn from the study are therefore of a speculative rather than a formal logical character. Each of the five basic approaches of Chapters II to VI has its limitations and conceptual bias "built in," so to say. The recommendations will, therefore, encourage a systematic reexamination of the different viewpoints, as well as empirical testing and experimental evaluation of the various propositions contained in the study. It is hoped, however, that this study, in some form, may prove useful as instructional material for teacher-in service programs and for courses in curriculum and instruction in the social studies.

Recommendations

Professional literature on the notion of concept is rather limited and scarce. Note, for example, that very few, if any, of the questions entertained in this study were considered by the 1971 publication of the National Council for the Social Studies on Concepts in the Social Studies. This suggests that there is much more to the idea of concept

than meets the eye of many educators in the field of curriculum and instruction who ordinarily employ the term. Considering the above observations, a number of recommendations follow from this study:

(1) It is recommended that a serious study be made of the epistemological question of concept. If the notion of concept is to function both on the empirical and on the theoretical levels, a rigorous methodological definition of the term is required.

(2) It is recommended that experimental studies be conducted that would determine the influence of a learner's existent conceptual structures on the learning of new concepts and on the nature and organization of further conceptualizations.

(3) More specifically, it is recommended that the notion of "conceptual fixity" be tested and measured experimentally.

(4) It is recommended that the meaning of concept meaning be studied systematically. It is hoped that programs for "strategies of meaning analysis" could be developed which would be of value for curriculum builders, for teachers, and for students.

(5) It is recommended that the functional roles of concept be explored and identified within the various cognitive styles of disciplined understanding.

(6) Empirical studies are recommended to determine the prevalence of concept abuse and misuse in the social

studies classrooms.

(7) And it is further recommended that the questions and topics of study suggested above be brought to the attention of curriculum builders and teachers.

Studies on concepts should aim at increasing the awareness of the educational possibilities as well as the problems and difficulties involved in employing the notion of concept. A better understanding of this subject matter will be of great value for teachers working in the classroom and educators working in the field of curriculum.

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